

Glossary of Terms

Acting in Good Faith – A sincere belief or motive without any malice or the desire to defraud others and sincere intention to deal honestly and fairly with others (see <u>AECP Policies & Procedures</u> POL-004)

Action Plans – As it relates to the *Concerns Policy* (POL-004), specific actions associated with Non-Compliance that realign procedures with the approved Animal Use Protocol (AUP) and/or current regulatory / veterinary / institutional standards of animal ethics and care, and may include Sanctions, as directed by the Animal Care Committee Executive Working Group

Animal-Based Science – Branches of scholarship where live vertebrate and cephalopod animals are used in research, teaching or testing

Animal-Based Scientist – Any person directly involved in branches of scholarship where live vertebrate and cephalopod animals are used in research, teaching or testing and who use and/or care for research animals under an approved AUP, e.g., AUP Holders and individuals identified within an AUP as responsible for animal monitoring and/or animal procedures

Animal Care and Use Records – Legibly written documentation located within the animal holding area as per the *Animal Care and Use Records Policy (POL-003)* and Facility Standard Operating Procedures (e.g. PI specific in-room animal binder) - in addition to and separate from Cage Card information - that chronologically and in real-time outlines all animal events, observations, actions and outcomes. Animal care and use records include the following: 1) the Animal Use Protocol; 2) cage cards; 3) animal husbandry/housekeeping records; 4) procedural / experimental records; 5) medical / health monitoring records; 6) sick animal records; and, 7) morbidity / mortality logs (see <u>AECP Policies &</u> <u>Procedures</u> POL-003)

Animal Care & Veterinary Services (ACVS) – A department under Western Research led by its Director – the University Veterinarian – that is responsible to provide animal health professional support for the Animal Ethics and Care Program and to serve Western's Research Community and its associated committees to ensure alignment with all external and institutional statutory requirements and to support animal-based science programs

Animal Care Committee (ACC) – Western's Animal Care Committee (ACC), under the leadership of its Chair and Vice Chairs, maintains and improves the Animal Ethics and Care Program (AECP) so it remains in compliance with all external and institutional statutory requirements, as outlined within its *Terms of Reference*. The ACC advises the Vice President, Research on all aspects of the program to allow the institution to ensure that Western's Research Community is in compliance with regulators' requirements, those who have direct certification and licensing authority for the AECP

Animal Care Committee (ACC) Coordinator/Officer – Administrative roles under the Department of Research Ethics and Compliance and ACC ex officio members dedicated to providing the ACC and Animal Use Protocol (AUP) Holders and their staff with support for ACC and AUP-related activities, as outlined by the Canadian Council on Animal Care (CCAC) in its *Terms of Reference for Animal Care Committees*



Animal Care Committee (ACC) Designate – An ACC member or institutional stakeholder, e.g. animal health professional, who is arms-length from the animal-based science under evaluation, assigned by the ACC to act on its behalf in accordance with specific policies and procedures, and who formally reports back to the ACC or its Executive regarding actions taken on the committee's behalf

Animal Care Committee (ACC) Directed Animal Use Protocols (AUP) – AUPs identified by the ACC as requiring Institutional Veterinarian evaluation of procedures and/or other aspects of the animal model in order to understand and/or confirm their impact upon the animal (see <u>AECP Policies &</u> <u>Procedures POL-020</u>)

Animal Care Committee (ACC) Executive – An ACC Working Group, as per the ACC Terms of Reference, that provides real-time feedback and support to institutional stakeholders accountable for the animal care and use program; provides leadership for animal ethics reviews; acts as front-line responders to Concerns brought to its attention, as outlined within the *Concerns Policy (POL-004)*; receives updates from ACC designates regarding their mandated activities; provides direction and support to other ACC Working Groups; and relays decisions to the Full ACC

Animal Care Committee (ACC) Field Study Evaluation Report Template – A report template used by the ACC and its designates for its evaluations of Field Research (see <u>AECP Policies & Procedures</u> POL-020)

Animal Care Committee (ACC) Leaders – The ACC Chair and Vice Chairs, as per the ACC's Terms of Reference

Animal Care Committee (ACC) Site Visits - Formal site visits undertaken by members of the ACC Site Visit Team as outlined within the ACC Site Visits Policy (POL-019) and Procedures (PROC-019) - see <u>AECP Policies & Procedures</u>. The intent is to assess annually the animal ethics and care program at each of the animal facilities and labs across Western's Research Community.

Animal Care Committee (ACC) Site Visit Checklist – A checklist followed by ACC Site Visit Team during visits to ensure focused observations and feedback (see <u>AECP Policies & Procedures</u> PROC-019)

Animal Care Committee (ACC) Site Visit Report Template – A standard template used to record all official information arising from ACC Site Visits (see <u>AECP Policies & Procedures</u> PROC-019)

Animal Care Committee (ACC) Site Visit Team – Minimum of three members as outlined within the ACC Site Visits Policy (see <u>AECP Policies & Procedures</u> POL-019)

Animal Care Committee (ACC) Working Group – Subgroups of the ACC that undertake specific projects on the committee's behalf, including (See <u>AECP Policies & Procedures</u> *Terms of Reference for ACC Working Groups*):

- An Executive
- Animal Use Protocol (AUP) Review
- Training Exemption



- Laboratory Animal Facility Supervisors and
- Policies and Procedures

Animal Ethics and Care Program (AECP) – Western Research Community's comprehensive integrated program consisting of institutional structures, policies and processes focused upon ensuring regulatory alignment of animal-based science activities that is centralized through Western's Vice President, Research and Animal Care Committee (ACC)

Animal Holding Area – A space designated to house / hold live animals for any length of time

Animal Morbidity - see AECP Policies & Procedures POL-009

A. For Purposes of Veterinary Interventions & Post Mortems – Any Sick Animal's condition that is beyond the experimental parameters identified in the related Animal Use Protocol (AUP)

B. For Purposes of Morbidity Log Record-Keeping – All Sick Animals

Animal Morbidity / Mortality Log – A record of animals that are Sick (presenting with clinical signs reflecting health concerns – physiological, psychological and/or behavioural – related or unrelated to experimental procedures) and/or animals that did not reach the planned experimental endpoint and were euthanized or found dead (see <u>AECP Policies & Procedures</u> POL-009)

Animal Mortality – Any animal that has died under any circumstance or condition, with the exception of one that has reached its experimental endpoint, as outlined within the related Animal Use Protocol AUP), including animals found dead and morbid animals requiring early euthanasia

Animal Procurement – The acquisition of live animals from either commercial or noncommercial sources, including breeding sources, for use in animal-based science associated with Animal Care Committee (ACC) -approved Animal Use Protocols (AUP). Procurement involves the assessment of both supplier and animal quality, animal transport, and animal conditioning postarrival (see <u>AECP Policies & Procedures</u> POL-008).

Animal Procurement Administrator – Animal Care Committee (ACC) -approved arms-length individuals having no direct reporting accountability to the related research, including arms-length facility supervisors or designates of Laboratory Animal Facilities who have received ACC pre-approval to procure animals involved in animal-based science activities (see <u>AECP Policies &</u> <u>Procedures POL-008</u>)

Animal Procurement Records – Documents directly associated with the procurement of animals including but not limited to animal health reports, requisition forms, vendor invoices, related permits and transport records (see AECP Policies & Procedures POL-008)

Animal Procurement Sources – Animal Care Committee (ACC) -approved commercial and noncommercial suppliers of animals used in animal-based science (see <u>AECP Policies & Procedures</u> POL-008)



Animal-Related Impact – The 'per animal' health and welfare effect of Animal Use Protocol (AUP) elements as described in detail in the 'Procedural Consequences' section of an AUP

Animal Use Protocol (AUP) – The Animal Care Committee's (ACC) mandatory animal ethics form that contains details of a AUP holder's intended live vertebrate and cephalopod animal use, which must be reviewed and approved by the ACC in advance of animal-based science activities (see <u>AECP Policies &</u> <u>Procedures</u> POL-002)

Animal Use Protocol (AUP) Drift – Animal-based science activities that depart from the approved AUP (see <u>AECP Policies & Procedures</u> POL-004)

Animal Use Protocol (AUP) Holder / Principal Investigator (PI) – A scientist responsible for undertaking animal-based science in alignment with an approved AUP under the auspices of Western's Animal Care Committee (ACC)

Animal Use Protocol (AUP) Review Working Group – A Working Group of the Animal Care Committee (ACC), per its *Terms of Reference*, consisting of six roles to include an Animal-Based Scientist, Community Representative, Institutional Veterinarian, Technical Representative, Non-Animal User, and the ACC Coordinator that undertake the reviews of AUPs on behalf of the Full ACC, as per the *Animal Use Protocols Policies* (POL-002 A-C) and *Procedures* (PROC-002 A-B) - <u>AECP Policies & Procedures</u>

Animal Users – Individuals who either use in animal-based science, or are employed to care for 'animals,' as defined by the Canadian Council on Animal Care (CCAC)

Annual Protocol Renewal (Renewal) – Within one year of Animal Use Protocol (AUP) approval for each continuance of the approved AUP and up to three subsequent years, AUPs undergo review by designates of the Animal Care Committee (CCAC), as per the *Animal Use Protocols Policy- Annual Renewals* (POL-002-B) and *Procedures* (PROC-A,B) - <u>AECP Policies & Procedures</u>. Annual updates will consider changes in standards and guidelines, and developments in the replacement, reduction, and refinement of experimental animal use from a retrospective and prospective review of the AUP.

Animal Ethics and Regulations Course – A Canadian Council on Animal Care (CCAC)-mandated online course focused on the ethics of animal use within animal-based science activities, and administered by designates of the Animal Care Committee (ACC) (see <u>AECP Policies & Procedures</u> POL-017)

Blinder – An object, similar in appearance to a Frisbee, hung on the front of a cage to allow an animal to control his/her own visual stimuli that acts as a visual barrier (see <u>AECP Policies & Procedures</u> POL-012)

Breeding Animal Use Protocol (AUP) – An AUP in which animals with desirable genetic traits are solely bred selectively to maintain or enhance those traits in future generations of animals

Cage Card – A cage label containing information specific to animals housed within as outlined within the *Animal Care and Use Records Policy* (see <u>AECP Policies & Procedures</u> POL-003) For non-aquatic species, cage labels must contain the following information specific to the animals housed within:



- Date of arrival or date of birth, depending on mode of arrival
- Species and sex
- Supplier (where the animals originated)
- Estimated age or weight
- Number of animals per enclosure (making changes as needed)
- Name of AUP Holder and emergency contact information
- Animal Use Protocol number including expiry date
- Any special animal care instructions

For aquatic species, labels must be maintained either directly on the tank or within the immediate holding area and must include the above items as well as a record of transfer history within the Facility.

Canadian Association for Laboratory Animal Medicine (CALAM) – A national organization for veterinarians whose vision is to be recognized and respected as leaders in laboratory animal welfare; committed to excellence in laboratory animal medicine and welfare for the global advancement of science, health and education; the group responsible for *CALAM's Standards of Veterinary Care*

CALAM Standards of Veterinary Care – Guidelines developed by the Canadian Association for Laboratory Animal Medicine (CALAM) regarding the roles of Institutional Veterinarians in the Animal Ethics and Care Program that is referenced by national and provincial regulators

Canadian Council on Animal Care (CCAC) – A not-for-profit organization, created in 1968 to oversee the ethical use and care of animals in science (research, teaching and testing) throughout Canada on behalf of Tri-Agency and the Canadian public; responsible for developing national policies and guidelines, assessing research facilities' compliance with these standards, and administering the Certificate of Good Animal Practice (GAP) to compliant facilities

Categories of Invasiveness – Levels of animal impact arising from experimental procedures, as outlined within Canadian Council on Animal Care's *Categories of Invasiveness in Animal Experiments* (1991) and *Guidelines on the care and use of wildlife, Appendix D – CCAC Categories of Invasiveness for Wildlife Studies (2003),* as follows:

- A Most invertebrates or live isolates
- **B** Little or no discomfort or stress
- C Minor stress or pain of short duration
- **D** Moderate to severe distress or discomfort
- E Procedures causing severe pain at or above the pain tolerance threshold of unanaesthetized conscious animals

Certificate of Good Animal Practice (GAP) – A Canadian Council on Animal Care (CCAC) Certificate of GAP is earned by institutions that:

• participate fully in the CCAC Program



- have been assessed by assessment panels composed of scientists, veterinarians and community representatives
- have been found by the panel and by the CCAC Assessment and Certification Committee to have standards of experimental animal care and use which satisfy the CCAC's guidelines and policy statements¹

Closure – Full stoppage of an Animal Use Protocol (AUP) by the Animal Care Committee (ACC). The Animal Use Protocol (AUP) is 'archived' in the system; final disposition of the animals will be determined the ACC Executive (see <u>AECP Policies & Procedures</u> POL-002)

Cognitive Enrichment – The Non-Human Primate (NHP) Environmental Enrichment program shall include exposure to a variety of intellectual enrichment opportunities to promote and utilize dexterity, coordination, and cognitive abilities (e.g. via the use of task-oriented feeders). Important considerations in the provision of NHP toys/devices include, but are not limited to, chemical and heat resistance, durability (depending on the nature of the item), comprised of non-toxic materials, and ensuring a rotation to mitigate boredom (see <u>AECP Policies & Procedures</u> POL-012)

Competency – as per Canadian Council on Animal Care (CCAC), the ability to effectively perform a particular task in relation to the care, maintenance or use of animals, while ensuring their welfare is protected as far as possible within the constraints of any approved Animal Use Protocols (AUP).² (see <u>AECP Policies & Procedures</u> POL-017)

Concerns – As it relates to the *Concerns Policy* (POL-004), anything communicated to any member regarding animal health and/or welfare, human safety, and Animal Use Protocol (AUP)-related issues. Concerns that cannot be readily resolved will be reviewed by the Animal Care Committee (ACC) Executive, as appropriate

Concerns Policy and Procedures – A framework for Western's Animal Care Committee (ACC) to effectively and collegially assess Concerns, and then respond to Incidents and Non-Compliance pertaining to animal-based science (see <u>AECP Policies & Procedures</u> POL-004)

Conflict of Interest (COI) – circumstance of a person or organization in a real, perceived or potential conflict between their duties or responsibilities related to research and their personal, institutional or other (secondary) interests.

Example: COI may occur when an individual's judgments and actions or an organization's actions in relation to research are, or could be, affected by personal, organizational or other interests, including, but not limited to, business, commercial or financial interests, whether of individuals, their family members, their friends, or their former, current or prospective professional associations or of the organization itself.

Examples of secondary interests for a Researcher include the following:

http://www.ccac.ca/en_/assessment/certification

¹ Canadian Council on Animal Care. Retrieved 03 February, 2016 from:

² Canadian Council on Animal Care. CCAC Guidelines on: training of personnel working with animals in science. P.5



- Is receiving or expecting to receive compensation from the sponsor in which the value of the compensation could be affected by the outcome of the study;
- Acts as an officer, director, or agent of the sponsor;
- His/her or their job status or compensation is impacted by the research (e.g., payment for speaking or leading study groups on behalf of the sponsor);
- Is receiving a finder's fee for the recruitment of research participants;
- Has a proprietary interest (e.g., patent, trademark, copyright interest, licensing agreement) in the tested product;
- Has (or family, spouse, close relationships) any equity interest in the sponsor;
- Receives payments of other sorts, which are made by the sponsor exclusive of the costs of conducting the clinical research (e.g., a grant to fund ongoing research, compensation in the form of equipment or retainers for ongoing consultation or honoraria);
- Is intending to recruit his/her own patients as research participants;
- Has identified him/her or themself for any other reason as having a conflicting interest (i.e., organizational conflict that may impact the research).

Examples of secondary interests for an Animal Care Committee member include the following:

- Is a Researcher or sub-Researcher on the Animal Use Protocol;
- Is directly involved in the conduct of the research;
- His/her or their job status or compensation is impacted by the research (e.g. research coordinator, payment for speaking/leading study groups on behalf of the sponsor);
- Is receiving or expecting to receive compensation from the sponsor in which the value of the compensation could be affected by the outcome of the study;
- Acts as an officer, director, or agent of the sponsor;
- Has a proprietary interest (e.g., patent, trademark, copyright interest, licensing agreement) in the tested product;
- Has any equity interest in the sponsor that when aggregated for the member and the member's spouse and dependent children;
- Any equity interest in the sponsor (i.e., any ownership interest, stock options, or other financial interest whose value cannot be readily determined through reference to public prices);
- Significant payments of other sorts, which are payments made by the sponsor exclusive of the costs of conducting the clinical research (e.g., a grant to fund ongoing research, compensation in the form of equipment or retainers for ongoing consultation or honoraria);
- Is in direct competition with the Researcher of the research project for limited resources, funding, sponsorship, or research participants; acts as a consultant for the sponsor; is considered a personal or professional adversary of the Researcher;
- Has identified him/her or themself for any other reason as having a conflicting interest

Conspecific – Animals that are members of the same species

Continuing Animal Use Protocol (AUP) – Application to the Animal Care Committee (ACC) to continue an AUP, which takes place every four years, per the *Animal Use Protocols Policy* (see <u>AECP</u> <u>Policies & Procedures</u> POL-002-A)



Crisis Management Plan – A document reviewed and approved by institutional stakeholders responsible for human and animal safety that outlines in detail the strategies designed to help stakeholders deal with a sudden and significant negative event associated within a Laboratory Animal Facility or Extra-Vivarial Space (EVS). Plans proactively identify potential risks; establish monitoring systems and practices to detect early warning signals of any foreseeable crisis; establish and train a crisis management team; and involve as many stakeholders as possible in all planning and action stages. Topics to include fire, flood, power outages, disease outbreak, or other threats to the well-being of animals and/or people that work in these areas (see <u>SOPs</u> ADM-SAF-501)

Critical Animal – A Sick Animal having serious to severe health concerns, as determined by an Institutional Veterinarian that requires immediate intervention in order to relieve unnecessary or unacceptable pain or suffering (see <u>AECP Policies & Procedures</u> POL-009)

Designate / Designee – An individual who is adequately trained and appropriately experienced with the animals under his/her care/oversight and who is authorized to act on behalf of his/her direct supervisor

Designated Animals – All other animals than those identified as Directed Animals whose initial diagnosis and treatment have been designated to Sick Animal Response (SAR) Designates, e.g. Veterinary Technicians, Animal Care Supervisors, trained and competent PIs, and their staff (see <u>AECP Policies &</u> <u>Procedures</u> POL-009)

- Includes all species not listed as directed, e.g. rodents, birds and fish
- Non-critical health concerns
- Non-critical sick animals associated with experimental groups with no known history of increased morbidity
- Non-critical animals not identified by an Institutional Veterinarian or the Animal Care Committee (ACC) to require his/her direct involvement

Directed Animals – see <u>AECP Policies & Procedures</u> POL-009

- Species Pigs, sheep, dogs, cats, non-human primates, and rabbits
- Conditions as determined by the Animal Care Committee (ACC) or an Institutional Veterinarian
- Any sick animal with critical (serious to severe) health concerns
- Any sick animals associated with experimental groups experiencing increased morbidity
- Any animal identified by an Institutional Veterinarian or the ACC to require his/her direct involvement on a case-by-case basis

Environmental Enrichment (EE) – Improvements to an animal's environment that provide additional benefit to the animal within the context of the animals' natural behaviour and biology; enhancing the environment of confined animals in order to encourage natural behaviours and improve their quality of life



Environmental Monitoring Systems – Systems that monitor temperature, relative humidity, and air exchanges, e.g., independent table-top thermo-hygrometers and / or a centrally monitored and controlled building system (see <u>AECP Policies & Procedures</u> POL-010)

Essential Stimuli – The Non-Human Primate (NHP) Environmental Enrichment (EE) Program provides stimuli under all five areas deemed essential to obtaining program goals including: Social enrichment; Sensory enrichment; Structural enrichment; Feeding enrichment; and Cognitive enrichment (see <u>AECP</u> <u>Policies & Procedures</u> POL-012)

Ethics Review – Ethics review of a proposed Animal Use Protocol (AUP) by the Animal Care Committee (ACC) that focuses on the level of harm to animals as balanced by potential benefits and scientific merit with specific application of Canadian Council on Animal Care (CCAC)'s Three Rs Tenet. The ACC functions as a microcosm of society to review AUP applications by applying the guidelines and policies of the CCAC and using their own expertise, experience, values, and common sense to reach decisions by consensus about what animal-based work should be allowed to proceed and under what conditions (see <u>AECP Policies & Procedures</u> POL-002)

Experimental Parameters – Animal Care Committee (ACC) pre-approved (via Animal Use Protocol (AUP)) experimental conditions, procedures or research models directly attributable to the research purpose that may alter an animal's normal physical, psychological and/or behavioural state, e.g. spinal cord injury model: lower limb paralysis

Extra-Vivarial Space (EVS) – Spaces used for animal-based science activities that are external to a Laboratory Animal Facility, with the exception of the Field (see Field Studies) (see <u>AECP Policies &</u> <u>Procedures</u> POL-016)

Feed Acquisition Records – A record of feed purchases to include source/supplier, lot number, milling date, acquisition date, nutrient content and quantity received (see <u>AECP Policies & Procedures</u> POL-010)

Feeding Enrichment – The Non-Human Primate (NHP) Environmental Enrichment (EE) program shall include the provision of food enrichment while being cognizant to limit the risk of obesity. Important aspects of NHP enrichment include providing a variety of food types, promoting foraging behaviours, the spatial distribution of items (e.g. uneven/different places in the cage area), and temporal distribution (e.g. a rotation to maintain novelty). Veterinary review is required when proposing the introduction of new feed items (see <u>AECP Policies & Procedures</u> POL-012)

Field Research – Animal-Based Science involving animal subjects considered wildlife that are studied and retained in their natural or semi-natural habitat or whose animal subjects are wild-caught and subsequently housed outside of their natural habitat within a Laboratory Animal Facility or Extra-Vivarial Space (EVS)

Field Researcher – A researcher whose animal subjects are wildlife that are studied and retained in their natural or semi-natural habitat or whose animal subjects are wild-caught and subsequently housed outside of their natural habitat within a Laboratory Animal Facility or Extra-Vivarial Space (EVS)



Field Studies – The scientific study of free-living wild animals in which the subjects are studied in their natural or semi-natural habitat by animal-based scientists associated with Western's Research Community

Full Animal Care Committee (ACC) Review - Review of Animal Use Protocol (AUP) forms – a combination of pre-meeting online review via the ACC's AUP management system, face-to-face meeting discussions and approval determination, and post-meeting final review and approval - by either the full ACC or an AUP Review Working Group, as per the Procedures for AUPs-Full ACC Review (PROC-002-A) - AECP Policies & Procedures.

Gustatory – Concerned with tasting or the sense of taste (see <u>AECP Policies & Procedures</u> POL-012)

Incident – As it relates to the *Concerns Policy* (see <u>AECP Policies & Procedures</u> POL-004), a Concern that is substantiated by evidence provided to and reviewed by the Animal Care Committee (ACC) Executive, which requires project refinements. May be either *administrative* or *procedural* in nature

- Administrative Incident Substantiated concerns associated with Animal Use Protocol form content (e.g. animal use exceeds authorized numbers, overdue form renewals); outstanding Canadian Council on Animal Care (CCAC)-mandated training; or incomplete/inaccurate animal record-keeping
- Procedural Incident An incident that affects the health, behaviour and/or well-being of an animal that has either not been pre-approved on an Animal Use Protocol (AUP), or contravenes current regulatory, veterinary or institutional standards of animal care and use; requires project refinement

Independent Pedagogical Merit Reviewer – At arms-length from and without conflict of interest with respect to the PI whose teaching/training project or program is under review (see <u>AECP Policies &</u> <u>Procedures</u> POL-014)

Independent Scientific Merit Reviewer – At arms-length from and without conflict of interest with respect to the PI whose project or program is under review. With respect to his/her association with the PI applicant (see AECP Policies & Procedures POL-013):

- Does not interact with the PI in the course of institutional duties,
- Not from the same immediate department or organization,
- Has not previously collaborated, published or been a co-applicant within the past five years,
- Has not been his/her student or supervisor,
- Is not a close personal friend or relative of the PI,
- Has not had long-standing scientific or personal differences with the PI,
- Is not in a position to gain or lose financially from the outcome of the review, or
- Does not believe he/she can perform an objective review.

In-Room Feed Records – In-room documentation of feed used within a given animal room to include summary of food type used, expiry date, and date of package opening



Institutional Veterinarian – A veterinarian within the Department of Animal Care and Veterinary Services (ACVS) that, under the direction of the University Veterinarian, provides veterinary support for the Animal Ethics and Care Program within Western's Research Community in alignment with the *CALAM's Standards of Veterinary Care* as well as external and internal regulators' laws, policies and guidelines

Laboratory Animal Facility – An Animal Care Committee (ACC) approved vivarium that has been purpose-built in alignment with national and provincial regulations; is used to house – containment and animal husbandry activities - animals for at least 12 hours, or for the life of an animal, whichever is less; and is directly overseen by a Facility Supervisor

Laboratory Animal Facility ('Facility') Supervisor – A trained, competent individual responsible for the oversight of a Vivarium who is arms-length (in principle and practice) from research activities and who is accountable to the University Veterinarian as regards animal health and welfare related matters

Major Animal Welfare Incident – As defined by the Canadian Council on Animal Care (CCAC), an event that leads to the unanticipated death of research, teaching and testing animals, or poses an immediate and significant threat to animal health or welfare. A major incident can refer to:

- a catastrophic failure of critical life support system(s) that leads to the death of research teaching or testing animals, or poses a significant threat to animal health or welfare;
- disregard of, or unintended failure to follow, practices or procedures that leads to the death of research, teaching or testing animals, or poses a significant threat to animal health or welfare
- significant and unanticipated morbidity or mortality unrelated to the above; or
- serious or continuous noncompliance with CCAC standards that leads to the suspension by the animal care committee or the institution of an animal-based activity that threatens animal health or welfare.³

See <u>AECP Policies & Procedures</u> POL-004

Medical/Health Monitoring and Procedural /Experimental Records – Legibly written documentation located within the animal holding area as per Facility Standard Operating Procedures (e.g. PI specific in-room animal binder) - in addition to and separate from Cage Card information - that chronologically and in real-time outlines all animal events, observations, actions and outcomes. Includes medical and experimental records, monitoring records, and morbidity and mortality records (see <u>AECP</u> <u>Policies & Procedures</u> POL-003)

Monitor Accuracy – Accuracy assessed by comparison of the monitor reading to a known reliable standard; may be performed in-house. Monitor variance from standard will be recorded for reference (either directly on the device or centrally as appropriate) (see <u>AECP Policies & Procedures</u> POL-010)

³ Canadian Council on Animal Care. Frequently Asked Questions - Certification of Animal Ethics and Care Programs (2019). Q. 4. pp.1-2. Retrieved from

https://www.ccac.ca/Documents/Standards/Policies/CCAC_FAQs_on_certification_of_animal_ethics_and_care_programs.pdf



Non-Commercial Vendor – Animal source other than a recognized vendor, e.g. academic institution, an animal-based scientist's animal colony (see <u>AECP Policies & Procedures</u> POL-008)

Non-Compliance – A demonstrated disregard for animal-related regulatory, veterinary and/or institutional standards and related policies and procedures and/or a demonstrated lack of empathy for animals used in animal-based science. Requires action plans and sanctions. May begin as an Incident or series of Incidents; if not readily resolved, may be considered to be Non-Compliance (see <u>AECP Policies</u> & <u>Procedures POL-004</u>)

Non-Conformance – Departure from any requirement established in policies and procedural documents

Non-Field Research – Research involving animal subjects studied outside of their natural or seminatural habitat (e.g. laboratory)

Normals – Physiological, psychological and behavioural norms for a given species

Occupational Health & Safety (OH&S) Review – A Canadian Council on Animal Care (CCAC)mandated review process external to the ACC under the responsibility of institutional safety officers and Research Western's Animal Research Safety Consultant. Required for Animal Use Protocols (AUP) containing biological, chemical, radioactive, imaging and laser devices (see <u>AECP Policies & Procedures</u> POL-002)

On Hold – As determined by the Animal Care Committee (ACC) Executive on a case by case basis, actions taken to limit animal-based science activities in the short-term until associated Concerns have been resolved (see POL-004). Limited activities may include one or more of the following:

- Limiting animal-based science activities, including but not limited to:
 - No new animal procurement
 - No experimental procedures
 - No breeding transfers out to research
 - No animals leave animal facility for experiments
 - Arms-length animal health professional/husbandry staff directly oversee animals
 - Fee for related services paid for by the animal-based scientist
- Limiting access to animals by animal-based scientists and their staff, or a sub-set
- Animals may be transferred to the Temporary Animal Holding Animal Use Protocol (AUP), as per POL-002 Animal Use Protocols - <u>AECP Policies & Procedures</u>

Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) – Provincial governing body responsible to administer the *Animals for Research Act* (R.S.O. 1990) through regular unannounced inspections of all areas associated with animals used in research, teaching or testing activities

Pedagogical Merit Form – The standard form administered by the Merit Review Committee of the Vice President (Research) Office, and completed by PIs to provide information to Pedagogical Merit



Reviewers, to include the intended learning outcomes, assessment methods, learning activities, the alignment of learning assessment methods with learning outcomes and activities, and efforts to identify alternatives (see <u>AECP Policies & Procedures</u> PROC-013)

Pedagogical Merit Review Committee – A committee of the Vice President, Research Office comprised of animal-based scientists and experts in the field of pedagogy both internal and external to Western's Research Community who are at arm's length from the Animal Care Committee (ACC) and who may be selected to oversee and perform Pedagogical Merit Reviews (see <u>AECP Policies &</u> <u>Procedures POL-013</u>)

Pedagogical Merit Reviewer Form – The standard form, appended to *Procedures for undertaking pedagogical merit reviews*, used by Pedagogical Merit Reviewers to assess the necessity of using live animals in teaching or training and/or to recommend potential Teaching/Training Alternatives (see <u>AECP Policies & Procedures PROC-013</u>)

Pedagogical Merit Reviewers – Expert and independent referees who act as formal assessors of the pedagogical merit of teaching/training involving live animals to determine if the involvement of live animals is essential, or if Teaching/Training Alternatives can be used (see <u>AECP Policies & Procedures</u> POL-013)

Pilot Study – A study limited to the fewest number of animals necessary to evaluate the appropriateness, feasibility and suitability of a particular animal model, procedure, or study design to meet defined scientific objectives. Pilots may be requested by the Animal Care Committee (ACC) to facilitate project refinements with a view to optimizing animal welfare via direct involvement of Institutional Veterinarians focused on refining techniques and ensuring appropriate health monitoring and interventions. Pilot Studies must be stand-alone Animal Use Protocols (AUP) (see <u>AECP Policies & Procedures POL-002-A</u>)

Post Approval Monitoring (PAM) Program – A Canadian Council On Animal Care (CCAC)mandated program overseen by the Animal Care Committee (ACC) and undertaken by arms-length designates (e.g., *Visits by Animal Health Professionals* (POL-020), *ACC Site Visits* (POL-019)) to ensure animal-based science practice aligns with principle (as outlined within the approved Animal Use Protocol (AUP)) and current standards of ethics and care (see POL-005) - <u>AECP Policies & Procedures</u>.

Post Approval Monitoring (PAM) Risk Analysis Record – A listing of all housing and procedure areas associated with Animal Care Committee (ACC)-approved Animal Use Protocols (AUP) that is maintained by Institutional Veterinarians and approved by the ACC Executive. Each location within the record is assigned risk levels based upon the following considerations (see <u>AECP Policies & Procedures</u> POL-005):

- Animal Use Protocol (AUP) Content
 - Species Prioritize ethically sensitive species, e.g. Non-Human Primates (NHP), dogs, cats
 - Category of Invasiveness
 - Novel nature of animal procedures or project, e.g. Pilot Studies
 - Frequency of procedures performed on an animal or animal group
 - Procedures that have the potential for causing problems in the animal model



- Any long and/or invasive procedures including but not limited to long anesthesia times
- Non-arms-length versus arms-length managed areas
 - o Degree and frequency of oversight by arms-length individuals
 - o Accountability structure of individual responsible for animal care
- Post Approval Monitoring History
 - o Animal Care Committee Annual Site Visits
 - AUP Compliance, e.g. recurring issues relating to animal health and welfare
 - Facility and Research Staff Feedback Concerns regarding use, care, monitoring, endpoints, AUP non-alignment
 - Directives from the ACC and/ or external regulators

Project Refinements – As it relates to the *Concerns Policy* (POL-004), adjustments to current AUP project parameters or related documentation pertaining to Incidents. Project refinements are initially proposed by the Animal Care Committee (ACC) Executive, communicated to the animal-based scientist, and through discussion with the animal-based scientist, agreed upon and implemented by the animal-based scientist with support from the ACC or its designates, as required; may require submission of a Protocol Modification

Protocol Modifications (Modifications) – Within-year changes to the approved Animal Use Protocol, as outlined within the *Animal Use Protocols-Protocol Modifications* Policy (POL-002-C) and *Procedures* (PROC-002-A,B) - <u>AECP Policies & Procedures</u>

Reasonable Effort – Attempts commensurate with an animal's condition and the necessity of timely intervention, as determined by an Institutional Veterinarian (see <u>AECP Policies & Procedures</u> POL-004)

Regulatory Requirements for Animal Procurement – Rules relating to procurement of animals used in animal-based science arising from national, federal, provincial and institutional regulations, e.g. the *Animals for Research Act* (R.S.O. 1990, Chapter A.22; R.R.O. 1990, Reg.22); *Fish and Wildlife Conservation Act*, 1997 (S.O. 1997, Chapter 41); Canadian Council on Animal Care (see <u>AECP Policies & Procedures</u> POL-008)

Related Stakeholders – Individuals involved in a regulatory activity internal to Western's Research Community - e.g. for Post Approval Monitoring: PIs, Laboratory Facility Supervisors, Institutional Veterinarians, Animal Care Committee (ACC) Designees, ACC Site Visit Team – or external, as applicable

Relevant Non-Human Primate (NHP) Stakeholders – Animal health professionals and Principal Investigators both internal and external to Western's Research Community having significant experience with non-human primates in captivity; external regulatory agencies(see <u>AECP Policies &</u> <u>Procedures</u> POL-012)

Research Animal Users – any person directly involved in the use and/or care of research animals under an approved Animal Use Protocol (AUP) including; AUP Holders; individuals identified within an AUP as responsible for animal monitoring and/or animal procedures; institutional members responsible for animal care and health monitoring and/or sick animal response



Responsible Persons (RP) – Individuals who, arising from their role within the institution and / or responsibilities as identified within an Animal Use Protocol (AUP), have direct accountability for the care and/or use of animals involved in animal-based science. As per the attestation signed off within an AUP, AUP Holders are included as RPs in all situations where their direct reports are identified through the Concerns (POL-004) reporting process.

Sanction – As it relates to the *Concerns Policy* (POL-004) - <u>AECP Policies & Procedures</u>, immediate measures taken in response to Non-Compliance; may involve Animal Use Protocol (AUP) 'On Hold' or 'Closed' as directed by the Animal Care Committee (ACC) Executive

Scientific Merit Review Form – The standard form administered by various departments / institutes that is completed by PIs to provide information to Scientific Merit Reviewers, which includes the intended project's objectives, hypotheses, potential contributions and methodological approach (see <u>AECP Policies & Procedures</u> PROC-013)

Scientific Merit Reviewer Form – The standard form used by Scientific Merit Reviewers to assess the scientific merit of Animal Use Protocols (AUP) (see <u>AECP Policies & Procedures</u> PROC-013)

Scientific Merit Reviewers – Expert and independent peers involved in either basic or applied research who act as formal assessors of the scientific merit of research projects (see <u>AECP Policies &</u> **Procedures PROC-013**)

Sensory Enrichment – The Non-Human Primate (NHP) Environmental Enrichment (EE) program shall include specific provisions that include stimulation of all five senses: visual, auditory, tactile, olfactory, and gustatory (see <u>AECP Policies & Procedures</u> POL-012)

- Important visual stimuli for NHPs include duration and quality of light, colours, motion, and the ability to control and enhance stimuli (e.g. via the use of mirrors and/or blinders).
- Important auditory stimuli for NHPs include the vocalization of other primates, sounds of the environment, music and naturalistic sounds. Every attempt should be made to mitigate background noise (e.g. Heating, Ventilation, and Air Conditioning (HVAC)).
- Important tactile stimuli for NHPs include natural and artificial materials; though, exposure to natural products/sources, including conspecifics, is preferred (e.g. grooming among conspecifics).
- Important olfactory stimuli for NHPs include the provision of objects that provide the ability to scent mark their environment and novel artificial scents, if properly used (e.g. Manzanita wood that has absorbed pure peppermint extract).
- Important aspects of the provision of gustatory stimuli for NHPs include ensuring a strong variety and taking into account species and individual taste preferences.

Sick Animal – Any animal that presents clinical signs reflecting all health concerns – physiological, psychological, and/or behavioural - related or unrelated to experimental procedures (see <u>AECP Policies</u> <u>& Procedures</u> POL-009)



Sick Animal Response (SAR) – A framework – policy and procedures – that facilitates a consistent and appropriate response to sick animals by animal health professionals (the Institutional Veterinarian and their designates), PIs and their staff in accordance with all regulatory standards (see <u>AECP Policies &</u> <u>Procedures</u> POL-009)

Sick Animal Response (SAR) Algorithms – Sick animal diagnosis and treatment decision trees/plans developed by Institutional Veterinarians and SAR Designates in conjunction with PIs and followed by SAR Designates (see <u>AECP Policies & Procedures</u> POL-009)

Sick Animal Response (SAR) Designate – An Institutional-Veterinarian-approved competent individual who is designated to follow the *Sick Animal Response Policy* (POL-009) and veterinarian SAR Algorithms and act under the instruction of, and report accordingly to, an Institutional Veterinarian regarding Sick Animal interventions

Social Enrichment – The Non-Human Primate (NHP) Environmental Enrichment program shall include specific provisions that address the social needs of NHPs that typically exist in social groups in nature. It is the most fundamental component of any NHP enrichment program. Social enrichment involves physical contact and social interaction with members of the same species as well as humans (see <u>AECP</u> <u>Policies & Procedures</u> POL-012)

Structural Enrichment – The Non-Human Primate (NHP) Environmental Enrichment program shall include opportunities to utilize a variety of structural elements. Important aspects of NHP structural enrichment include complex and alternating functional spacing, height variation in regards to the placement of items, and the provision of obstacles and visual barriers. Dominance-related needs and behaviours must be considered when providing enrichment opportunities. (see <u>AECP Policies &</u> <u>Procedures POL-012</u>)

Teaching/Training Alternatives – Replacements - either absolute (non-animal models) or relative (e.g. eggs, cell cultures, tissues, or species with significantly lower potential for pain perception) - that may be used to teach or train others while maintaining learning outcomes

Three Rs Tenet – Principles developed by Russell and Burch (1959) that provide a framework for the ethical use of animals in scholarship: Replacement, Reduction and Refinement. Replace – avoid or replace the use of animals wherever possible; Reduce – utilize strategies that reduce the number of animals used while maintaining experimental design; Refine – modify procedures and/or practices to reduce animal stress or pain

University Veterinarian – Western's senior veterinarian accountable to Western's Vice President, Research who is responsible for providing expert leadership for the citywide Animal Ethics and Care Program (AECP) in conjunction with institutional senior administration and the Animal Care Committee (ACC), and for acting as Director of the Department of Animal Care and Veterinary Services (ACVS)

Veterinary Technician – An animal health professional designation obtained through successful completion of a two- or three-year diploma from a recognized post-secondary institution



Vice-President, Research – The senior administrative officer of the University responsible for the Animal Ethics and Care Program within Western's Research Community, as outlined within *the Senior Administrator's Terms of Reference* (see MAPP 7.12, Appendix 1).

Visits by Animal Health Professionals – Formal visits/rounds undertaken by Animal Care and Veterinary Services (ACVS) animal health professionals that support the Animal Care Committee (ACC) in fulfilling its mandate to ensure appropriate oversight of Animal-Based Science within Western's Research Community, as per POL-020 - <u>AECP Policies & Procedures</u>

Western's Research Community – Institutions and their departments involving animal-based scientists having Animal Use Protocols under the jurisdiction of Western's Animal Care Committee (ACC)

Wildlife - Animals sourced from their natural habitat