

UNIVERSITY COMMITTEE ON LABORATORY ANIMALS

July 2022

CCAC NEWS

Researchers should note there have been several major changes at CCAC in the last year in terms of new guidelines and requirements, which are summarized below. Full descriptions can be found on the [CCAC website](#). Researchers familiarize themselves with the new guidelines, as they will affect the review of protocols, housing of animals and other factors which impact research.

Dr Michael Baar, who was the senior assessment Director at CCAC, has retired. Dr Baar served CCAC for over 20 years and was also the consulting veterinarian for St Francis Xavier University. Dr Baar participated in many assessments over his career at Dalhousie University campuses and was noted for his collegial and balanced approach to regulatory duties.

In May 2022 Dr Patricia Turner, who was the former Director of the laboratory animal veterinary postdoctoral residency training program at the Ontario Veterinary College and is currently the Corporate Vice-President, Global Animal Welfare for Charles River Laboratories, was awarded the Dr Harold C Rowsell Award by CCAC recognizing her lifelong work and commitment to laboratory animal welfare.

IDENTIFICATION OF SCIENTIFIC ENDPOINTS, HUMANE INTERVENTION POINTS, AND CUMULATIVE ENDPOINTS

Please review the new CCAC guidelines approved March 2022: Identification of scientific endpoints, humane intervention points, and cumulative endpoints is part of a series of general guidelines documents that outline principles for the ethical care and use of all animals in science. This series streamlines information for investigators, study directors, instructors, animal care committees, facility managers, veterinarians, and animal care personnel to help facilitate improvement in both the care given to animals and how experimental procedures are carried out. More specific information on humane interventions can be found in the CCAC guidelines developed for specific types of animals.

This guidelines document applies to all animals used for scientific purposes, including wildlife brought into laboratory animal facilities and third-party-owned animals that are used off-site (e.g., at commercial farms or shelters).

PROCESS FOR SETTING AND MONITORING SCIENTIFIC ENDPOINTS AND HUMANE INTERVENTION POINTS

Guideline 1

The scientific endpoints, humane intervention points, and monitoring regime must be described in a protocol and approved by an animal care committee before commencing any animal-based scientific activity. This information should be easily accessible to everyone working with the animals.

Section 2.1 Before Starting the Scientific Activity, p.7 (see link below).

Guideline 2

When there is insufficient evidence to establish scientific endpoints prospectively, pilot studies must be conducted to identify the earliest point that the scientific activity can be terminated. Pilot studies must focus

on determining welfare-appropriate endpoints, not on generating useable scientific data. The results of the pilot must be presented to the animal care committee before the protocol proceeds.

Section 2.1.1 Choose the Scientific Endpoints, p.7 (see link below).

Guideline 3

Animals must be monitored for the duration of the protocol. Interventions must be applied when animals reach a humane intervention point. To safeguard animal welfare, the chosen humane intervention points and scientific endpoints may need to be adjusted during a scientific activity; changes to these points should be incorporated as amendments to protocols.

Section 2.2 During the Scientific Activity, p.10 (see link below).

Guideline 4

A review of the effectiveness of the humane intervention points and scientific endpoints should occur when a scientific activity is completed. Any potential refinements should be included in future protocols (including renewals) and standard operating procedures (SOPs).

Section 2.3 After the Scientific Activity is Complete: Retrospective Analysis, p.12 (see link below).

CCAC guidelines: Identification of scientific endpoints, humane intervention points, and cumulative endpoints

CUMULATIVE ENDPOINTS

Guideline 5

Cumulative endpoints must be considered for all animals held long-term and for animals that have multiple scientific experiences, as described by the policy set by the animal care committee. These animals must have lifetime experience records that are updated as necessary and reviewed at regular intervals. The current welfare status of each animal should also be assessed regarding its continued use in science (including teaching and training) before protocol renewal or approval of the use of each animal in a new protocol.

Section 3.1 General Guidance on Decision-Making Regarding Cumulative Endpoints, p.14 (see link below).

Guideline 6

In certain types of studies (e.g., longevity studies), cumulative endpoints must inform the scientific endpoints as there is the potential for the cumulative endpoints to be reached before a desired scientific endpoint.

Section 3.2.3 Aging and Longevity Studies, p.17 (see link below).

Link to the CCAC full document:

https://ccac.ca/Documents/Standards/Guidelines/CCAC_guidelines_scientific_endpoints.pdf

ANIMAL WELFARE ASSESSMENT INFORMATION

The committee is working towards implementing the new Animal Welfare Assessment from the CCAC which was approved in 2021.

From the CCAC Animal Welfare Assessment Guideline

Assessment of the welfare status of an animal is important to:

- reduce negative affective states and enhance long-term positive affective states of the animal by promoting conditions (environment, resources, husbandry) that are appropriate for the individual animal;
- improve the likelihood that any signs of pain or distress are detected as soon as possible so that relevant mitigation strategies/humane intervention points can be implemented as appropriate;

- ensure the physiological, behavioural, and psychological condition of the individual animal is suitable for achieving the desired study outcomes;
- ensure that the scientific activity remains within the bounds of the protocol, as approved by the local animal care committee;
- inform and validate the assignment of a category of invasiveness for a protocol;
- improve (or ensure) the quality of scientific data collected from animals; and
- continuously improve our understanding of animal needs in order to optimize housing and husbandry practices.

CCAC Animal Assessment Guidelines:

Guideline 1

The animal care committee is responsible for overseeing the implementation of welfare assessments, but the assessments themselves should be completed by a team involving protocol authors and their delegates, veterinarians, and animal care personnel. Where possible, the assessments should draw on information gathered through research, veterinary, and husbandry activities.

Guideline 2

Animals should be healthy and express a high prevalence and diversity of positively motivated species-typical behaviour, along with low levels of abnormal behaviour. They should neither experience negative affective states, such as pain, frustration, or fear, nor display behavioural signs of chronic anxiety or depression.

Guideline 3

Welfare assessments must be performed regularly for all animals. The assessments should take into account physical condition, psychological well-being, and impact of experimental procedures. When known, cumulative lifetime experiences and environmental parameters should also be included in the assessment.

Guideline 4

Information gathered in relation to welfare assessments should be recorded in a format accessible to investigators, veterinarians, animal care personnel, and animal care committees.

As the committee works towards implementing this assessment, you may see changes to the Form A, new attachments, new SOP documents, and enhanced enrichment for various species.

As the committee works towards implementing these new guidelines, you may see changes to the Form A, new attachments, new SOP documents, and enhanced enrichment for various species.

TEACHING INVOLVING ANIMALS AND STUDENTS

We would like to ensure adequate time for review teaching/field studies, to that end the committee would like to see teaching protocols well before students are registered in the course. Thus, all teaching protocols must be submitted to the UCLA by December 2022. This will allow adequate time for pedagogical and UCLA review before the academic calendar goes live in March 2023.

FIELD STUDIES INVOLVING ANIMALS IN THE WILD

Please ensure that your protocol is submitted well in advance of the field work we recommend 3 to 4 months in advance to allow time for adequate review. If you are unsure if your work requires UCLA approval, please contact our office to discuss. If you need access to funds prior to protocol review, there is a mechanism to do so, please contact the UCLA office for more information if needed. If your project is not grant funded, it likely requires peer review, this can be arranged with the UCLA office and processed by Research Services. Any permits that are required for the field work would need to be included with the protocol submission along with an Attachment D or submitted once received, please note that UCLA approval will be pending receipt of approved permits if required.

TO ALL LABS WITH AN APPROVED ATTACHMENT J

Animal work is always encouraged to be done centrally in one of the animal care facilities, however if your lab requires specialized equipment, or another justified reason to bring animals outside of the facility an Attachment J is required to be included with the protocol submission. The attachment J's are tracked in the Romeo database, and the committee is responsible for oversight of these areas as well as the animal care facilities. Since the pandemic restrictions are much less severe, the committee is working hard to ensure that we see all lab spaces outside of the main animal facilities within the next year. A small group of UCLA members will be visiting the lab spaces to assess the approved attachment J, and to review and assess the space where animals are held/procedures are completed. Questions you may hear from the site visit committee are:

- What type of procedures are being done here?
- How are the animals transported to the lab at a time and how long do they remain?
- Are protocol and SOP documentation easily accessible in the lab space?
- How is the lab secured from the public?
- Where and how are controlled drugs stored?
- Is appropriate PPE supplied to the lab staff?

OTHER RECENT GUIDELINES APPROVED BY CCAC

- **CCAC Timelines for new Rat and Mouse Housing Requirements**
<https://ccac.ca/en/news-and-events/news/2022headlines/ccac-timelines-for-rat-and-mouse-housing-requirements.html>
- **Identification of scientific endpoints, humane intervention points, and cumulative endpoints:**
https://ccac.ca/Documents/Standards/Guidelines/CCAC_guidelines_scientific_endpoints.pdf
 - **Endpoints FAQ:**
https://ccac.ca/Documents/Standards/Guidelines/CCAC_FAQs_on_scientific_endpoints.pdf
- **Animal welfare assessment:** https://ccac.ca/Documents/Standards/Guidelines/CCAC_guidelines-Animal_welfare_assessment.pdf
 - **Animal welfare assessment Implementation:**
https://ccac.ca/Documents/Standards/Guidelines/Implementation_of_the_CCAC_guidelines_on_animal_welfare_assessment.pdf

QUESTIONS?

Please feel free to contact the office at any time for further information (UCLA@dal.ca)