



Canadian Council on Animal Care Conseil canadien de protection des animaux

IMPLEMENTATION OF THE CCAC GUIDELINES ON: LABORATORY ANIMAL FACILITIES – CHARACTERISTICS, DESIGN, AND DEVELOPMENT

In 1993, a CCAC workshop on "Approaches to the Design and Development of Cost-effective Laboratory Animal Facilities" was held in Ottawa. Since then the proceedings from the workshop have proved useful to many architects, engineers and institutional representatives charged with the task of upgrading their animal facilities. The *CCAC guidelines on: laboratory animal facilities - characteristics, design and development* (2003) incorporates and updates the information that was provided by the 1993 workshop proceedings, and has been developed by Drs David Neil and Donald McKay, University of Alberta, with the collaboration of the CCAC Facilities' Standards Subcommittee.

The goal of the *CCAC guidelines on: laboratory animal facilities - characteristics, design and development* (2003) is to promote optimal levels of animal care and to facilitate good research without curtailing new and innovative ideas for facility design. Therefore, the document should be used as a tool for achieving acceptable standards.

The guidelines should be used not only in the design of new facilities, but also in the renovation of existing facilities. In addition, the guidelines should be used as standards which existing facilities must strive to attain, with the understanding that new facilities are to be built, or renovations are to be made to meet these standards as needs and budgets dictate. However, it should be clear that the overall aim is to ensure the availability of facilities necessary to maintain appropriate standards of animal care and use. This is the principal criterion that CCAC Assessment Panels will use when assessing the acceptability of facilities as part of an institution's animal care and use program.

The document applies to facilities for animals such as rats, mice, rabbits, dogs, cats etc. held in controlled environments, but not to those used in field settings. Facilities for farm animals, fishes, and short-term holding of captive wildlife are described in other CCAC guidelines. However, many of the general principles described within the *CCAC guidelines on: laboratory animal facilities - characteristics, design and development* (2003) are applicable to most species maintained in captive environments for the purposes of research, teaching and testing.

This guidelines' document does not address building codes or safety codes and standards. It remains the responsibility of consultant architects and engineers to address these issues in concert with the responsible institutional officials. In addition, biosafety guidelines and

containment standards must be implemented whenever facilities are intended to house animals that will be infected experimentally with human and/or animal pathogens. The *CCAC guidelines on: laboratory animal facilities - characteristics, design and development* (2003) do refer to barrier systems for reducing or minimizing cross contamination since these are important concepts in all animal facilities.

The renovation or new construction of laboratory animal facilities must meet certain basic functional criteria in order to be conducive to the well being and safety of the animals, to provide an appropriately-appointed and safe workplace for personnel, and to establish a stable research environment. These criteria are outlined as guidelines in the first section of the [*CCAC guidelines on: laboratory animal facilities - characteristics, design and development*](#) "The Characteristics of a Laboratory Animal Facility".

The second part of the *CCAC guidelines on: laboratory animal facilities - characteristics, design and development* "The Process for the Planning Design and Development of a Laboratory Facility" outlines how the guidelines can be incorporated effectively into the various phases associated with the construction of new facilities or the renovation of facilities already in existence. This section emphasizes a team approach to ensure that the needs of all those associated with the facility are considered. These include the animal users, the facility managers, the laboratory veterinarians and care technicians, the plant and maintenance personnel, as well as senior management, responsible for the overall budget. Worked examples are provided in the Appendices to the guidelines' document, to assist readers to identify the various stages of the process.

As part of the implementation of the *CCAC guidelines on: laboratory animal facilities - characteristics, design and development* (2003), institutions that are participants in the CCAC Assessment and Certification Program should continue to submit their plans for new facilities or renovation of older facilities to the CCAC Assessment Directors for review. Feedback from the review will provide advice to institutions to ensure that the criteria outlined in the *CCAC guidelines on: laboratory animal facilities - characteristics, design and development* (2003) are met, and that the design will be functional for its intended use. In addition, submission of plans will assist CCAC in validating the usefulness of this new guidelines' document.