Special Report

Canadian Council on Animal Care: Its Role

H. C. Rowsell

Every year in Canada about 2,000,000 animals are used in research (85.5 percent), mandatory testing (9.5 percent), and education (4.7 percent). Ninety percent of these are rats, mice, fish, and fowl. Surveillance over the use of experimental animals, including wild vertebrates and invertebrates such as octopi and squid, is the responsibility of the Canadian Council on Animal Care (CCAC), a national, voluntary peer-review organization, founded in Ottawa in 1968.

Funded by Canada's two major granting agencies, the Medical Research Council (MRC) and the Natural Sciences and Engineering Research Council (NSERC), the CCAC comprises 20 member organizations from academia, government, industry, laboratory animal science, and the animal welfare movement.

Assessment Visits

Both scientists and animal welfare advocates are included on CCAC panels, which assess every three years (or more often if needed) Canada's universities and community colleges, government laboratories, and commercial laboratories. The evaluations are based on CCAC's Guide to the Care and Use of Experimental Animals, volumes 1 and 2 (1980, 1984), and supporting monographs. Institutions that continue to fail to comply with CCAC requirements face loss of funding from the MRC and NSERC. Since this policy was published in 1985, those found in noncompliance have actively addressed CCAC's concerns, and it has not yet been necessary to withdraw grants.

The imposition of Noncompliance Status is the responsibility of the CCAC as a whole, acting on the recommendations of the assessment panels. It should be noted that where the health of the animals is involved, an assessment panel has the authority to order the animals immediately relocated and to close the facility until it can be brought up to CCAC standards. This rather drastic measure has been necessary only a handful of times.

There has been, however, a difficulty in perception on the part of some in the animal welfare movement who have asked: "If this institution has been declared in continued Noncompliance with CCAC guidelines, why has this not been reported to the granting bodies and its funding then withdrawn?"

To clarify the situation, a new and more flexible four-category format has recently been prepared, which, for example, now categorizes those institutions that are actively addressing CCAC recommendations within a reasonable time frame as being in Provisional Noncompliance. When CCAC's recommendations have been satisfactorily implemented, the institution moves to Provisional Compliance and then Compliance. Conversely, it could move to Noncompliance, in which case the granting bodies would be notified, and action taken.

Recently, the possibility has been raised that CCAC may move to an accreditation scheme resembling that of the American Association for Laboratory Animal Care (AALAC) but operated within the current assessment program. Accreditation has been suggested in an MRC/NSERC report, which has been several years in preparation and is anticipated to be submitted for public comment in the summer of 1990.

It might be noted that institutions are assessed by CCAC free of charge. The budget of the Council this year is approximately $1 million and is borne by the MRC and NSERC.

Animal Care Committee (ACC)

Since its inception, CCAC has required the establishment of local Animal Care Committees. These committees comprise scientists representing departments using animals, a veterinarian(s), representation from non-animal-using faculties, and a community representative(s). They must approve each experiment as being ethically acceptable before a study can begin. This applies not only to research, but also to teaching and mandatory testing.

ACCs also have the authority to stop a study if approved procedures or deviations from the protocol cause an animal pain or distress and to have an animal humanely killed if the distress or pain cannot be alleviated. The committees' effectiveness is evaluated both during assessments and through additional visits by CCAC directors.

CCAC's concept of the ACCs has only recently been adopted in the U.S., (where they are commonly known as...
Institutional Animal Care and Use Committees), the Federal Republic of Germany, and the Netherlands. An Australian council based on CCAC also has been established recently.

**Legislation**

Canadian federal legislation to protect animals comprises Section 402 of the federal Criminal Code, revisions to which were tabled in the House of Commons on May 19, 1988. Legislation in place in the provinces of Ontario, Saskatchewan, and Alberta complements CCAC guidelines; however, standards in those provinces without legislation are as high as those with legal requirements, due to the CCAC program's Canada-wide coverage.

These facts notwithstanding, the Canadian Federation of Humane Societies (CFHS) has recently undertaken to prepare federal legislation to govern animal use, including provisions to increase spending on alternatives and to require additional community representation on ACCs.

Two Private Member's Bills introduced in Ontario to amend its Animals for Research Act failed to pass.

Bill 190 had sought to preclude use in testing of the Draize (eye irritancy) test in rabbits for other than medical use and the LD-50 in which animals are force-fed a product until half of them die. In November 1989, the federal Department of Health and Welfare dropped its requirement for use of the LD-50.

Bill 21, which would have given municipalities an option of turning over unwanted, stray pound dogs to research laboratories, did not receive the necessary Third Reading; an unsuccessful attempt was made to revive it in the spring of 1990.

**Alternatives**

The CCAC has always supported, wherever possible, the use of alternatives as defined by the Russell-Burch "three R's" tenet of reduction (in animal use), replacement (by alternative methods), and refinement (of experimental techniques).

**CCAC Publications**

In addition to its Guide, the CCAC publishes Syllabus for a Course in the Basic Principles of Laboratory Animal Science (1985). It also has prepared a number of "living documents"—monographs that are revised as current knowledge and ethical concerns dictate and that are used in conjunction with the Guide.

CCAC's Ethics of Animal Investigation has been amended 10 times since it was first published in 1980. Its requirements include, for example, that multiple invasive procedures or painful experiments cannot be used solely for instruction of students in the classroom and that use of muscle relaxants or paralytics without anesthetics during surgical procedures is unacceptable.

The CCAC also produces Guidelines on Acceptable Immunological Procedures, which deals primarily with routes of administration and proper usage of Freund's complete adjuvant in producing immune response.

Because of an increasing awareness of the need to provide environmental enrichment for the experimental animal, and bearing in mind upcoming American requirements for providing enrichment for nonhuman primates and exercise for dogs, a CCAC committee has prepared guidelines for Social and Behavioural Requirements of Experimental Animals (SBREA). A highly respected member of this expert committee is Thomas L. Wolfe, director of the Institute of Laboratory Animal Resources (ILAR), Commission on Life Sciences, National Research Council. The SBREA guidelines cover not only dogs and nonhuman primates, but also cats, rodents, rabbits, farm animals, poultry, and animals held in metabolism cages.

CCAC also publishes Categories of Invasiveness in Animal Experiments, which was originally based loosely on those of the Washington, D.C.-based Scientists Center for Animal Welfare, but which have been continually revised and last year were completely rewritten.

All four of the above documents, plus a number of other sections covering, for example, pain in animals, euthanasia, and Guidelines for Animal Care Committees are being collated in a Supplement to the CCAC Guide, with publication slated for the summer of 1990.

CCAC also produces a semiannual newsletter, Resource. All CCAC publications are in both English and French and have worldwide distribution.

The database for CCAC's publication, Research Animals in Canada, is maintained at the secretariat. The CCAC's mandate is a simple one: to work for the improvement of the care and use of experimental animals. We hope to continue to aim toward this goal, to the benefit of both humans and the animals with which we share this planet.