



A possible organization chart on animal use and care program management in an institution

# APCF Training Newsletter

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## IACUC

by Siva WH Tsang (PhD, Scientific Officer, APCF)

### What is an IACUC?

Institutional Animal Care and Use Committee (IACUC) is a local working group that research facilities must appoint to oversee a laboratory animal care and use program (Program). In Hong Kong, approval of animal research proposals or *protocols* by the Animal Ethics Committee (AEC, an equivalent of the IACUC) is required by UGC in order for the principle investigators (PI) to get funded with government money. The protocols must be approved by an ethical process. The Department of Health administers the ethical use of animals as mandated by the Cap 340 Animals (Control of Experiments) Ordinance. The Department of Health seeks guidance from the Agriculture, Fisheries, and Conservation Department (AFCD)'s [the Code of Practice for Care and Use of Animals for Experimental Purposes \(Code of Practice\)](#) for the administration and enforcement of Cap 340.

IACUC reports to a senior administrator known as the Institutional Official (IO). The IO must have administrative authority to commit resources to ensure required compliance are met. Together with the IO and the attending veterinarian (AV) or equivalent, IACUC constitute the three-legged stool supporting the Program.

### Composition

Referring to the [Guide for the Care and Use of Laboratory Animals \(NRC 2011\)](#) or the [Guide](#) by AAALAC International, the IACUC membership includes the following:

1. a Doctor of Veterinary Medicine either certified (e.g., by ACLAM, ECLAM, JCLAM, KCLAM) or with training and experience in laboratory animal science and medicine or in the use of the species at the institution,
2. at least one practicing scientist experienced in research involving animals,
3. at least one member from a nonscientific background, drawn from inside or outside the institution,
4. at least one public member to represent general community interests in the proper care and use of animals. (Public members should not be laboratory animal users, affiliated in any way with the institution, or members of the immediate family of a person who is affiliated with the institution.)

For institutions with many administrative units or departments, no more than three voting members should be associated with a single administrative unit

Along with the standard outlined in the *Guide*, local guideline should also be applied. For example, the member in the first of the above

list should be a registered veterinary surgeon, i.e. Category A of the AEC membership, in the *Code*). Further conditions on the membership are specified in the *Guide* and in the *Code of Practice* respectively.

### Roles

The committee is responsible for the oversight and evaluation of the entire Program and its components. According to the *Guide*, the oversight functions include

- review and approval of proposed animal use (protocol review) and of proposed significant changes to animal use;
- regular inspection of facilities and animal use areas;
- regular review of the Program;
- ongoing assessment of animal care and use; and
- establishment of a mechanism for receipt and review of concerns involving the care and use of animals at the institution. After review and inspection, a written report (including any minority views) should be provided to the IO about the status of the Program. (p25)

For each duty, the *Guide* provides some of the essential parameters for the IACUC members to achieve the Program outcomes meeting the performance standard, which will be evaluated during the AAALAC site visit. For example, 11 bullet points for the basic considerations on protocol review and further

7 pages of description, and with further referral to some other literatures, to note the key issues during the protocol review process.

### How long it takes to determine if an IACUC is functioning properly?

The following are two examples extracted from AAALAC reference resources. They may help in illustrating the importance of IACUC preparedness.

#### Example 1

After an AAALAC site visit, the committee may say in a Suggestion for Improvement (SFI):  
*Many of the rodents were housed on wire-bottom cages for both short and long term studies. While wire-bottom caging may enhance sanitation, there is evidence that suggests rodents prefer bedded solid-bottom cages. In addition, pressure neuropathy may result when animals are housed on wire-bottom cages for extended periods of time. The IACUC should review the use of wire-bottom caging for rodents and ensure that caging enhances animal well-being consistent with good sanitation and the requirements of each research project.*

This example indicates that the IACUC should participate in the Program down to a level like reviewing animal housing condition in each protocol early during a protocol review process, which happened up to 2 to 3 years before the AAALAC visit (for an approved protocol may be valid up to 2 to 3 years). The review must be professional in order to provide justification when being questioned by AAALAC site visitors.

#### Example 2

*The IACUC review of proposed protocols as reflected in meeting minutes, nor the protocol review form, documented the justification for either the species proposed or the numbers of animals to be involved in proposed studies.*

*The site visitors, while reviewing IACUC records, could not identify any committee evaluation of the scientific justification for the species, nor number of animals, in any proposed protocol, or in the minutes of IACUC deliberations. The IACUC chair indicated that she did not realize these factors should be evaluated during protocol reviews.*

*Although the Institutional Animal Care and Use Committee (IACUC) was structured appropriately, the activities of the IACUC deviated significantly from*

*requirements for review of proposed protocol review. Scientific justification for the species, nor number of animals in any proposed protocol, was considered. It is the institution's responsibility to provide suitable orientation and specific training to assist IACUC members in understanding the requirements of the regulations and in carrying out their responsibilities in accord with the Guide requirements related to protocol review. Council must be assured that IACUC members have been provided adequate training opportunities to ensure understanding of the requirements of the Guide and that Protocol review procedures also meet Guide requirements.*

Similarly, this example indicates that the IACUC must exert its specific roles via gaining professionalism by training. The institution, being represented by the institutional official (IO), is responsible to promote training, provide supports and assure the quality of all assigned IACUC members.

### Lesson learned from previous AAALAC site visits

A survey conducted by AAALAC international indicates that IACUCs contribute the largest proportion of all mandatory item deficiencies identified by AAALAC site visits in the Pacific Rim. It is followed by the deficiencies in the institution/administrative and veterinary medical care aspects, and lastly by the physical plan, being the least problematic. The distribution of defective items is distinctly different from those in North America and Europe, suggesting an impact of cultural difference on the establishment of animal care and use programs.

