

## **ANIMAL WELFARE OFFICERS' WORKSHOP**

### **NOTES FROM THE WORKSHOP HELD AT THE WAITE CAMPUS, UNIVERSITY OF ADELAIDE, ON WEDNESDAY, 29 NOVEMBER, 2000.**

The workshop preceded ANZCCART's 2000 conference and was attended by 35 persons from universities, CSIRO, research institutes and government agencies.

#### **Introduction**

The purpose of the workshop was threefold. The first topic addressed welfare issues relating to the use of transgenic animals in research and teaching, including cloning. The second topic related to standard operating procedures, including those currently available and those which need to be written and considered whether there is a need for uniformity between institutions. The third topic covered the role of animal welfare officers within institutions and how best to coordinate communication between them.

#### **1. Welfare issues related to cloning and transgenic animal production**

The Chairman, Dr Tim Kuchel (IMVS), in introducing the topic, explained that the NHMRC had asked ANZCCART to hold national workshops on this topic next year. Today's discussion therefore provided an opportunity to identify major issues and concerns and to provide a structure for next year's workshops, which are likely to be held by ANZCCART in Sydney and Melbourne.

Issues relating to this topic which were identified by the workshop included:

- animal welfare;
- ethics;
- public discussion (e.g., accountability; genetically manipulated organisms (GMOs)); and
- scientific (i.e., how it is done).

##### **1.1 Welfare issues**

Dr Kuchel asked whether cloning and/or transgenic animal production were likely to cause any improvement in animal welfare? It was felt that, while the use of transgenic animal to conduct a particular experiment may require fewer animals, more animals will have been utilised in the production of transgenic animals than if non-transgenic animals had been used.

This raised the question of the wastage of animals involved in the production of transgenic animals. How does an Animal Ethics Committee (AEC) balance this wastage with the value of the experiment? What is the welfare cost of the transgenic animals which have been bred? Could keeping frozen embryos of transgenic lines solve this problem?

There is also wastage of mice when a researcher requires only a single sex. The excess of the other sex may be culled, but these animals are not counted as having been used for experiments. This problem was identified in the Report of the Senate Select Committee on Animal Welfare into Animal Experimentation (1989).

### ***Welfare implications of transgenic manipulations***

One of the difficulties in this field is to easily and accurately identify which animals are in fact transgenic. One method is by phenotypic mapping, although phenotypic changes relating to the transgene can sometimes take time to be manifested. This is particularly important when using mouse models of human diseases. While there are many potential positive benefits to the study and treatment of human and animal diseases, there needs to be a form of cost/benefit analysis performed by the AEC (and also by the investigator).

The AECs concerns will relate to:

- effects on the animal;
- what are the end points of the experiment (it is not possible to be too specific, as each case is different);
- what is already known about this transgenic animal model. A transgenic animal monitoring sheet, such as been recently developed by Monash University, is very useful;
- possible communication problems between scientist and AEC members; and
- how does the AEC monitor the transgenic animals?

### ***Can genetic engineering have adverse long-term effects on a species?***

With regard to cloning, the AEC needs to consider the efficiency of production of cloned animals. Some projects to investigate the causes of problems associated with cloning are already in progress.

AECs need to extend their interest to include the need for husbandry training of technical and research staff with particular animal species to be used, as well as the importance of education of these staff about ethical and welfare issues and the need for constant monitoring of the animals. The principal responsibility for all of these lies with the chief investigator, rather than the AEC, which is unlikely to have the technical knowledge.

### ***Ethical issues***

It was agreed that the approach needs to be applied and to take into account the social/community context. This is currently being addressed in New Zealand by means of a Royal Commission into Genetic Engineering.

It is very difficult for an AEC to come to a decision on genetically-engineered animals based on ethical issues. This needs to be addressed, perhaps at future workshops to be held by ANZCCART. Such a workshop needs to address the scope and impact of new Australian legislation relating to genetic engineering. An AEC decision on such issues needs to reflect the views and expectations of the wider society, which are expressed in ethical, social and legislative terms.

## **2. Standard Operating Procedures (SOPs) - what do we currently have and is there a need for uniformity between institutions?**

This part of the workshop was chaired by Dr Alana Mitchell, Animal Welfare Liaison Officer of the NHMRC's Animal Welfare Committee.

### **Introduction**

Dr Mitchell explained that ANZCCART had been considering the most effective means of determining what SOPs are available in Australia from universities and other scientific institutions and how to make these more widely accessible.

It appeared from a survey of those present at the workshop that most institutions have their own SOPs and that these should be readily useable (sometimes after minor modifications) by other institutions. A major use of SOPs is to ensure quality control within an organisation.

### **What is the approach to preparing a SOP?**

- A need can be identified, by a researcher, technician or AEC, due to lack of sufficient information about a specific procedure;
- a researcher can submit a SOP for AEC approval, e.g., for repetitive procedures likely to be used by different groups;
- an AEC can ask researchers to develop a SOP (e.g., for blood collection in rodents);
- development of a SOP is usually an iterative process, based on modification of an existing SOP; and
- it is best prepared by person(s) with specific expertise.

### **Who oversees SOPs?**

SOPs should become a minimum standard of best practice for a particular procedure as well as an operating method. They should be constantly reviewed and updated by their institutional researchers in conjunction with their AEC.

### **How can they be coordinated?**

It has been suggested that ANZCCART collate available SOPs, and with the agreement of their institutions, place these on its website or cross-link to them. Alternatively, ANZCCART could list all institutions whose websites include AEC information and then provide a link to these. A possible problem will be that of confidentiality, as some SOPs are intended only for internal use. Sometimes these are only available to staff of that institution via intranet. Such links via ANZCCART's website would require regular updating to ensure that the links still work and that the required information is available. This issue can be further explored via the ANZCCART email discussion list.

It was pointed out that this places a responsibility on ANZCCART for providing such information, which is really the responsibility of individual institutions. Preparation of SOPs is best done by staff within an institution who have the appropriate technical knowledge.

SOPs need to be broad in their coverage - e.g., “acceptable ways to obtain a blood sample from a rabbit”, or “how to prepare polyclonal antibodies”. There is a danger of their being cited by researchers who may not have a full understanding of the required methodology.

### **Should SOPs be proscriptive or just guidelines?**

It was agreed that the latter was generally the case, although this depends on the subject. A test for a product which requires certification will need to be very specific. The Therapeutic Goods Administration (TGA) in Canberra has SOPs for such purposes, as they are required for legal reasons.

Some institutions could develop difficult and perhaps conflicting SOPs for certain procedures, e.g., blood sampling of mice by retro-orbital bleeding versus from the tail vein or saphenous vein.

### ***Should the public have access to SOPs?***

In many cases, there is no reason why they should not be readily available from a website. This would apply to guidelines or general principles, accepted by the AEC as minimum best practice. Researchers would need to justify to the AEC if they did not wish to follow them.

The second type of SOP is a very specific procedure, prepared by researchers and then approved by the AEC. Access to these may be restricted by the need to use a password.

### **Examples of SOPs currently available**

- Blood collection - in different species, including fish and higher order invertebrates
- Surgical procedures - in a range of species
- Induction of disease - e.g., streptozotocin diabetes
- Euthanasia in a range of species
- Anaesthesia and analgesia in a range of species
- Cage sanitation and sterilisation
- Operational procedures for animal facilities
- Animal welfare monitoring (when to intervene and by whom).
- Humane end points
- Grievance and complaints procedures.
- Other AEC administrative procedures, e.g. confidentiality.

## **Conclusion**

The following recommendations were made:

- That the ANZCCART webpage includes links to other websites, where this is acceptable to both parties.
- That SOP information on institutional websites contains contact details, including the AEC.
- ANZCCART should act as a facilitator of information, but should not write SOPs or be seen to endorse particular SOPs.
- ANZCCART to investigate links to international sources of information of interest to AECs (Note that this is already in progress).
- That the ANZCCART email discussion list be utilised to provide information about available SOPs and suggestions for the writing of new SOPs.

### **3. Animal Welfare Officers in Scientific Institutions .**

#### **Introduction**

Introducing this topic the Chairman, Dr Robert Baker, explained that there had been considerable recent discussion in a number of Australian universities over the role and functions of an institutional animal welfare officer (AWO) and the qualifications and experience which were required. The December, 2000 issue of *ANZCCART News* will also be addressing this issue.

He referred to a tabled list of major Australian universities, how their animal facilities are managed and whether each has an AWO (Table 1, attached). He then opened the topic for discussion, which took the form of a number of questions.

#### **What is the role of animal welfare officers?**

The general point was made that an AWO, apart from his or her actual duties, is part of an institution's insurance policy, related to risk management. Their major areas of involvement are in:

- training and education;
- considering the ethical context of research and teaching using animals with regards to public opinion; and
- being familiar with the relevant legislation, such as that related to genetically modified animals.

#### **Is there an advantage in the AWO being from outside the institution? Should the position of AWO be created? If so, why?**

##### ***(1) Situation at Monash University***

The AWO is a member of the Monash Animal Welfare Committee, which has an overarching responsibility for all the AECs at Monash. The AWO attends all meetings and is available as a resource for AEC members and researchers between meetings. With a significant role in

monitoring and helping with application to the AECs, the AWO is also the clinical veterinarian who deals with health issues.

## ***(2) Situations at the University of New South Wales and Sydney University***

Both universities employ veterinarians to manage their animal facilities, but neither has an AWO.

The animal facility manager at UNSW has a role as de facto AWO re monitoring of animals. The suggestion has been made at UNSW that a veterinarian/AWO is not justified.

### **Does the AWO sit on the AEC as a Category A member or ex officio? Is there a conflict of interest if the AWO is a member of an AEC?**

This varies between institutions, with the AWO in most cases being ex officio rather than a voting member of the AEC.

The Code of Practice states the importance of “relevant experience” in a Category A member.

One interpretation of the role of the AWO is to ensure accountability to the public; therefore a lack of any real or perceived conflict of interest is important.

South Australian legislation has mandated a Category E member on AECs, described as the daily care person and who is likely to be the manager of the animal facility.

### **Currently, what are some of the different situations for AWOs in institutions that use animals for research and teaching?**

With regard to AgResearch (NZ), the AEC has an AWO from outside the institution who is employed by AgResearch for time dedicated to the AEC (approximately 20% time).

Murdoch University, WA, employs a livestock manager who looks after animal services. The AWO's position is approximately 50%, with the other 50% being spent on human ethics. The AWO is not a veterinarian.

LaTrobe University employs an administrative executive officer.

Novartis Animal Health and Agricultural Science - a full-time AWO reports to the head of the Research and Development section. Animals covered are 1,000 sheep, cattle, dogs and cats.

The Garvan Institute, Sydney - the manager of the animal facility is the Executive Officer of the AEC and the Category A member of the AEC.

University of Otago, Dunedin, New Zealand - an appointed AWO reports to the Vice-Chancellor, (Research).

CSIRO nationally - the role of AWO lies with the people who hold the relevant positions, i.e., three animal facility managers at the Australian Animal Health Laboratory at Geelong, who report to the senior program manager, and veterinarians across all the sites.

**To whom do AWOs report in the different organisations? Is there a problem if the AWO and the manager of animal services report to the same person? If the manager of animal services is not performing to standard and the DVC (Research) is responsible, how will an issue raised by the AWO be handled? Could it be suppressed?**

The AWOs present at the Workshop reported directly to various senior personnel. These included the Director of the Research Branch, (not the DVC Research), the DVC (Research) and the Dean of the Science Faculty.

There was no particular concern expressed regarding possible conflicts, as this will generally be determined by the personalities of the individuals, rather than their qualifications.

**What is the ideal relationship between the AWO and the Manager of Animal Services? Can one person have both roles without the risk of a conflict of interest developing?**

Points made in discussion were:

- two appointments is better from a consideration of workload;
- the AWO preferably should be independent of animal services due to transparency considerations;
- where a large organisation has a number of animal houses, the AWO can encourage uniformity of practice across the organisation;
- it depends on the size of the institution;
- the individual is accountable and the AEC should see that any issues are dealt with and provide the necessary checks and balances; and
- in Canada, the Director of Animal Services or Animal Care would be a veterinarian with responsibility for all matters related to animal welfare, and would perform similar duties to those of an AWO.

**How could AWOs coordinate the promotion of their professionalism to give a clearer message to organisations of their role and significance to all issues of animal welfare?**

Suggestions included;

- setting up an electronic network for the exchange of ideas such as had occurred in the workshop discussions'
- joining the Special Interest Group of the Australian Veterinary Association, Australian Veterinarians in Ethics Research and Teaching (AVERT); and
- becoming involved in the Australian College of Veterinary Science's new Chapter in Animal Welfare.

## Management of Animal Facilities and Animal Welfare Officer Position in the Major Australian Universities \*

\* At November, 2000

UNIVERSITY	HOW ARE ANIMALS MANAGED?	QUALIFICATIONS OF DIRECTOR	IS THERE AN ANIMAL WELFARE OFFICER?	QUALIFICATIONS OF ANIMAL WELFARE OFFICER
Melbourne	Split between 5 Faculties, each of which manages its own animal house	n/a	Yes	Veterinarian
Monash	Director of Animal Services and half-time veterinarian	Animal technician	Yes (half-time) shared with Animal Services	Veterinarian
Sydney	Director of Animal Services	Veterinarian	No	n/a
New South Wales	Director of Animal Services	Veterinarian	No	n/a
Queensland	Director of Animal Services	Position currently vacant	Yes	Veterinarian
Western Australia	Currently under review	To be determined	Yes	Ag. Scientist
ANU	Director of Animal Services	Veterinarian	Yes (this position held by Director of Animal Services)	Veterinarian
Adelaide	Director of Animal Services	Animal technician	Not at present	No appointment made.
New England	Director of Animal Services	Veterinarian	Yes - Director of Animal Services	Veterinarian
Newcastle	Director of Animal Services	Veterinarian	Yes	Veterinarian
Tasmania	Director of Animal Services	Veterinarian	Yes - Director of Animal Services	Veterinarian
Flinders	Director of Animal Services	Animal technician	No	n/a
Murdoch	Livestock Manager		Yes (half-time)	Not a veterinarian