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By email: ethics@nhmrc.gov.au

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Project Officer – Animal Welfare
Health and Research Ethics Section
NHMRC
GPO Box 1421
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Dear Sir/Madam,

‘Guidelines on the Use of Animals for Training Interventional Medical Practitioners and Demonstrating New Interventional Medical Equipment and Techniques’

AAHR (Australian Association for Humane Research) Inc. is a non profit organization that challenges the use of animals in research and teaching and promotes the use of more humane and scientifically valid non-animal alternatives. We welcome this opportunity to provide our views on the above document.

Justification

According to the latest available national statistics, 831,418 animals were used for the “achievement of educational objectives” in 2006. This figure represents around 13% of all animals used in research and teaching in Australia.¹

Teaching is an area in which we CAN replace animals and yet they are still being used. In 2006 AAHR corresponded with the Department of Anatomy and Cell Biology at Monash University who we learned was implementing programs to teach anatomy through anatomical models and e-learning programs such as ADAM, Anatomedia and Primal. However they were continuing to support dissection. We queried this and were pleased when they responded that their dissection program is limited to human cadavers.

¹ Annual statistics collated by AAHR Inc.

Similarly, in September that year, Murdoch University WA completely eliminated some of its core terminal veterinary surgical teaching laboratories. Instead of killing pigs and sheep the students neutered shelter animals instead.

The Australian code of practice for the care and use of animals for scientific purposes clearly states that “Scientific and teaching activities using animals may be performed only when they are essential.” Considering the many alternatives that are now available, using animals to train medical practitioners and to demonstrate equipment and techniques cannot be justified and goes against the 3R’s principle.

Australian public perception

Last year AAHR engaged market research firm, Nexus Research to measure Australian public perceptions on the issue of animal experimentation. This important work was enabled through a grant from Voiceless. Some of the key findings included:

- 87% consider that the number of animals used for research and teaching in Australia (approx 7 million p.a.) is unacceptable or is capable of reduction.
- 71% support the use of scientific alternatives to the killing of animals in research.

Overseas position

There is an increasing trend overseas for medical schools to replace the use of animals in their teaching courses. We provide the following excerpt from an interview with US cardiologist Dr John Pippin MD. (Antidote 2008):

Antidote: Education is crucial. Could you tell us something of your work with PCRM to replace the use of animals in US medical schools?

Pippin: This is an area of success that not only saves animals and improves medical education, but also helps change the landscape so we have more fertile ground to address animal replacement in medical research. A quarter century ago live animal labs were ubiquitous in U.S. medical schools: 107 medical schools used them. By 1996 the number had declined to 77, and as the areas of medical simulation and human-based curriculum change advanced this number fell to 40 in 2001.

Today the number of U.S. medical schools with live animal labs is only eight, at the same time that the number of schools has increased to 154. Perhaps most encouraging is the fact that all nine new medical schools opening from 2007 through 2009 have established animal-free curricula from inception. Clearly the current standard of excellence in medical education does not include the use of animals, and it is inevitable that the weight of progress and scrutiny will eliminate the use of live animals in medical student education. That will be a proud day, but it will be just one step toward much greater progress.

Alternatives

Many medical institutions around the world are embracing new alternative technologies. Regrettably, Australia does not appear to have as much commitment to fund the development and validation of alternatives.

The following abstract “New alternative to animal models for surgical training”, has been published in the journal ATLA (Alternatives To Laboratory Animals) by FRAME (Fund for the Replacement of Animals in Medical Experiments):

Laboratory training models are essential for developing and refining surgical skills, especially in microsurgery. A perfect training model is the one that can provide the same situation during surgery, in the same anatomy; the closer to live surgery the model is, the greater the benefit. The lack of an accurate vascular model has sometimes necessitated the use of live models when bleeding, and vascular liquid filling is desired for optional learning. We developed a new model utilising human cadavers that can replace the use of live anaesthetized animals for surgical training. The vessels in a cadaveric specimen were connected to artificial blood reservoirs. The arterial side was connected to a pump to provide pulsating pressure inside the arteries, while the venous side was kept under static pressure that applied to the reservoir. This method provides a condition that simulates live surgery in terms of bleeding, pulsation and liquid filling of the vascular tree. It is an excellent alternative model and can be applied to the whole cadaver or to a particular cadaveric specimen (head, arm, leg) or to an isolated organ. It is distinctive and of a great practical value for training in a wide range of surgical procedures, Utilising this technique could forever eliminate the use of live anaesthetized animals for surgical training.²

Conclusion

Considering the public’s dissatisfaction in using animals for research and teaching, the moral dilemma of using sentient animals as ‘tools’, the growing availability of alternatives and the sound pedagogical value of these alternatives, AAHR considers the use of animals for training and demonstration purposes to be unjustified on both scientific and ethical grounds. We therefore seek an outright ban on the use of animals for such purposes.

Yours sincerely,

Helen Marston
Chief Executive Officer
AAHR Inc.

² <http://www.cababstractsplus.org/abstracts/Abstract.aspx?AcNo=20043110127>