

Inside this issue:

Review of the Australian code of practice for the care and use of animals for scientific purposes 1

Essay Competition - Animal-Based Research in New Zealand 2

Recent Articles of Interest 5

ANZCCART Member of the Year Award for 2011 5

ANZCCART Events Calendar 5

Review of the *Australian code of practice for the care and use of animals for scientific purposes*

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The *Australian code of practice for the care and use of animals for scientific purposes* (Code of Practice) is currently under review, with public consultation expected in the latter half of 2011. This review will be of interest to institutions and individuals involved with the care and use of animals in all areas of research and teaching, including field trials, product testing, diagnosis, the production of biological products and environmental studies.

Background

The National Health and Medical Research Council (NHMRC) has three major research ethics guidelines:

- *Australian code for the responsible conduct of research* (2007) (Code of Conduct)
- *National statement on ethical conduct in human research* (2007) (National Statement)
- *Australian code of practice for the care and use of animals for scientific purposes* (2004) (Code of Practice)

NHMRC provides a leadership role in development of guidelines and advice for animal research. The Code of Practice was originally produced in 1969 and has been revised periodically since that time.

The Code of Practice encompasses all aspects of the care and use of animals for scientific purposes in medicine, biology, agriculture, veterinary and other animal sciences, along with industry and teaching. It provides an ethical framework and guiding principles of good conduct, to inform the process of ethical review and provide guidance for investigators, teachers, institutions, Animal Ethics Committees (AECs) and all people involved in the care and use of animals for scientific purposes. The Code of Practice covers all live non-human vertebrates and higher order invertebrates.

The current edition of the Code of Practice (2004) was revised by the NHMRC and endorsed by Commonwealth Scientific and Industrial Research Organisation (CSIRO), Universities Australia (UA), and

the Australian Research Council (ARC). All States and Territories have variously incorporated the Code of Practice into their animal welfare legislation.

Processes for current review

The current review of the Code of Practice is being organised through the Office of NHMRC. The intent of the review is:

- To ensure that the Code of Practice continues to be a relevant, accurate and applicable guide.
- To focus the content of the Code of Practice on ethical principles and best-practice guidance.
- To reflect the need for best-practice guidance to be principles-based and evidence-informed.
- To consider how the *Guidelines to promote the wellbeing of animals used for scientific purposes: The assessment and alleviation of pain and distress in research animals* (2008) could supplement the Code of Practice as a reference document for best practice guidelines.
- To be aware of, and take into account, international views.

The processes followed for the initial phases of the review have involved a systematic and extensive collection of advice from a broad range of stakeholders.

An initial targeted consultation process was undertaken to identify potential issues and challenges with the Code. Stakeholders consulted in this initial phase included researchers, research institutions, universities, Animals Ethics Committees, relevant government departments and animal welfare organisations. Code Writing Groups were established to consider the submissions received during the targeted consultation phase, and to provide detailed advice on the content and structure of specific sections of the Code of Practice.

Advice was also sought from the Code Reference Group, an advisory group to NHMRC which includes representatives from the current endorsers of the Code of Practice (CSIRO, UA and ARC), relevant Commonwealth Departments, all State and Territory jurisdictions, and animal welfare organisations. The NHMRC Animal Welfare Committee has provided advice and oversight throughout the process. Prior to its release for open public consultation, the draft

revised Code of Practice will be further considered by the NHMRC Research Committee and Council.

Public consultation

The full public consultation process will commence once the outcome of this review process is complete and the draft revised Code of Practice is assembled. This is expected to occur in late 2011. At such time, a call for comments from the public will be advertised in the national press and on the NHMRC website <http://www.nhmrc.gov.au/guidelines/consult/index.htm>

All interested persons are encouraged to participate in the public consultation process. If you wish to be notified of this and other public consultations by NHMRC, we suggest that you sign up for our fortnightly email subscription service "NHMRC Tracker" (<https://www.nhmrc.gov.au/media/subscription/index.htm>).

Please contact ethics@nhmrc.gov.au if you need further information.

Animal-Based Research in New Zealand

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The National Animal Ethics Advisory Committee (NAEAC) of New Zealand, ran an essay competition for secondary school students in 2010, with the goal of promoting awareness of the regulatory system in place for governing research using animals. The title was "Describe and analyse the use of animals in research in New Zealand, including examples of how and why animals are used, and how their use is regulated and controlled". The competition was open to all New Zealand secondary school students, and entries were received from throughout the country. The essay from the runner up is published below and the winning essay will be included in the next edition.

As our society continues to grow more advanced, many new things are developed to benefit our lives, but despite all this, we still have control of and power over the animals of New Zealand. This has become a larger and larger issue in recent years, as both sides of the animal research debate are developing

their arguments: those for animal research argue that we need it, and those against it argue that it isn't moral, and take the view of Thomas Dixon: "Animals have the right to be treated as human beings of value in themselves, not as the means to human ends."¹ However, the stronger argument seems to be that of most scientists, those who are sure that animal-based research is necessary.

Animal based research has been proved to be very beneficial to New Zealand, and there are many reasons why animals are used for research purposes. Mainly, animal research can be used to make developments that will improve the lives of either other animals, or humans. Nowadays, our lives are affected by so many scientific developments, and so many of these have been made possible by animal based research: "The benefits or successes of animal-based science are so widespread that it is hard to imagine any area of our lives that is unaffected by them."² One example of the way that animal research can be beneficial to New Zealanders is recent research into causes of obesity, which we know is a huge threat to the future of our society. Previous research into obesity and the following diseases it causes has showed some evidence between things that occur before birth, and subsequent obesity in offspring. Obviously humans wouldn't be willing to experiment on their own offspring, so animals have been used to investigate the matter further. From this, a pattern emerged that, offspring of a female parent with maternal high fat (MHF), are considerably more obese than others. This discovery is one of huge benefit to our society, and is likely to influence the obesity epidemic positively in the future. It would not have been possible without the use of animal-based research. Animals used in research can also benefit other animals, and in turn benefit the economy of New Zealand. A big problem within New Zealand is 'ryegrass stagger', a condition which occurs when livestock eat grass blades with high toxin levels, these levels caused by heat. "A better understanding of the mechanism of ryegrass staggers and the development of treatments is therefore of considerable interest to farmers."³ In this case, mice were used to show exactly how the toxins in question worked and moved in affected animals, make a cure or preventative treatment far more feasible. Mice had to be used in this case as they had special physical characteristics that made the experiment possible.

Clearly, animal based research is a necessity if we want science to continue to benefit the lives of both animals and humans. However, because of the controversy surrounding the issue, and the control we have over animals, regulations are in place to cause the best possible outcomes for those involved.

The regulation of use of animals in research is necessary to ensure that animal treatment is ethical, and to ensure the best possible research results. Consistent development has meant consistently higher standards of research, and scientists know that these standards are needed to ensure good results. This, and ethical treatment, are promoted by the Welfare Act of 1999, which everyone using animals for research has to follow, under the guidance of the Animal Ethics Committee (AEC). This committee promotes the three Rs, "replacement, reduction and refinement"⁴, which aim to decrease the use of animals (especially those of higher orders), and replace them with other alternatives. As well as this, many organizations have been developed to ensure people follow the Animal Welfare Act and treat animals well. One of these is the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC International). This private, non profit organisation assesses research institutes via a voluntary process, a process which the University of Otago is considering. "Although the accreditation process is voluntary, more than 770 companies, universities, hospitals, government agencies and other research institutions in 31 countries have earned AAALAC accreditation."⁵ Closer to home is the Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART), the mission statement of which is: "ANZCCART will foster and promote best practice in ethical, social and scientific issues relating to the use and well being of animals in research and teaching."⁶ This organisation also promotes the three Rs, and between organisations like these, and the Welfare Act, there are rigorous regulations surrounding the use of animals in research.

Despite the large amount of legislation and regulation surrounding animal-based research in New Zealand, there are still a large number of different opinions on the subject, making its future in New Zealand a relevant issue. However, taking into account a range of views, I believe that animal-based research is only going to become more sophisticated and more beneficial for both humans and animals.

There are still however many negative opinions of animal-based research, as can be seen in this opinion of a protester of research, who talks about how they plan to affect the scientist involved: "He cannot survive in business without the support of the community and other businesses. We aim to expose him and cut off all of his support."⁷ This was in reaction to beagles being used for testing at a facility near Hastings, in 2007. I think that the huge reaction in this case was partly due to the animals in question, beagles can be more easily related to our family pets or, 'man's best friend', than mice or other rodents, making the research more of an issue. In response, the scientist in question (Dr Allen Goldenthal), said "Everything you take - food additives or food colouring or cosmetics - it's all gone through extensive testing to ensure it is safe."⁸ Here he presents a rational point of view, I think the extent of positive effect that animal testing has on our lives and safety is often outweighed by the negative social stigma that animal-based research has developed over the years. In fact, the testing facility mentioned had also recently been testing anti-cancer drugs on rabbits, surely this is acceptable, and surely those protesting wouldn't have issues using these drugs if it would save themselves or a loved one. In my opinion, with the continuous development of science, and the decrease in use of higher order animals (A study in the UK showed that 15% less animals were used),⁹ issues and protests like this will decrease and animal-based research will become less of an issue and will be recognised more for its positive aspects.

Another issue that has been raised in regard to the future of animal-based research is that of whether or not current legislation is sufficient for future developments. It has been recognised internationally that as science develops, legislation will also have to develop and become better and more ethical. Professor Paul Flecknell states that, "A new way of recognising pain and emotional states is needed among scientists, veterinarians and animal care staff."⁹ I am sure that developments like this will occur, and while legislation is currently sufficient, with new development, some areas will need to be changed. As John Martin said, "We cannot be complacent."¹⁰ In fact, New Zealand has already proved itself to be able to apply these new changes, as seen in the enforcement in the new European Union legislation about animal welfare at slaughter. The extensiveness of current legislation

means that it is currently acceptable, and I am sure that with any new developments, New Zealand will prove to be flexible and will be quick to change necessary legislation, ensuring a healthy future of animal-based research in New Zealand

As a student in New Zealand, until undertaking this research I had a very limited knowledge of animal-based research in New Zealand, and had a negative opinion of it gained from the media, and the negative stigma that surrounds this issue. Like the 92% of people questioned in a phone survey,¹¹ I didn't have a basic knowledge of legislation in regard to this issue, and this was perhaps what had given me such a negative opinion. I now have a far more positive opinion on this issue and hope that it will continue to be such a positive and beneficial one for New Zealand and the world.

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Recent Articles of Interest:

Animal Research: Battle Scars

A recent survey conducted by Nature, which involved nearly 1,000 biomedical scientists revealed that nearly one-quarter of those biologists felt they had been affected by animal activists. The full article may be viewed online at: <http://www.nature.com/news/2011/110223/pdf/470452a.pdf> or in NATURE, 24 February 2011, Vol 470, p453.

The Rise of Animal Law

An article in Science Magazine reports on the growing interest in how the legal system deals with animals and explores the implications for researchers. This article may be viewed on line at: <http://www.sciencemag.org/content/332/6025/28.full.pdf> or in The Rise of Animal Law, Science, Vol 332 1 April 2011, pp 28-31.

ANZCCART Member of the Year Award for 2011

This year, ANZCCART is once again delighted to be able to recognize the exceptional work done by offering the AEC Member Outstanding Service Award. **2011 nominations close on Friday 29 April.** Check [here](#) for further details.

ANZCCART Events Calendar

Remember to check the [Events](#) page on the ANZCCART Website for upcoming National and International conferences and events.

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