

NAEAC Newsletter October 2020



Update from the Chair of NAEAC

Kia ora.

When I wrote the last newsletter in June, little did I think that the spectre of COVID19 would still be hanging over us three months later and that there would be an ongoing element of uncertainty about the medium-term future.

Many things have changed, including (for many of us) the way we have been working recently. A whole new assortment of pressures has emerged and (along with personal activities) travel, events, meetings etc. have all been casualties.

In that last newsletter I was very enthusiastic about a change to the way NAEAC holds its biennial Workshop and I was eagerly anticipating a move to an on-line format. Since then, due to recurring uncertainties and a complete change of workload for some members (and AECs) in recent months, the committee reluctantly resolved at its meeting on 1 September to cancel the 2020 AEC Workshop. There remained enthusiasm for continuing with planning, and a tentative programme was agreed, but when it came down to the crunch of organising and coordinating the day in a format that was unfamiliar to some (organisers and participants) the committee's final resolution was that the most effective outcome was to not hold the workshop.

On behalf of the other committee members, I apologise if you were eagerly anticipating an on-screen date in November. While the decision was to abandon the Workshop for 2020, the model of an electronic workshop format is still high on our agenda.

Aotearoa New Zealand Three Rs Awards

See later in this newsletter for an announcement regarding funding for Three Rs research.

Also, the closing date for applications for the Aotearoa New Zealand John Schofield Three Rs Implementation Award has been extended to Friday 16 October.

Mātauranga Māori

NAEAC and its sister committee NAWAC have an ongoing commitment to incorporate Mātauranga Māori into their operating models and to include more te reo in their meetings.

Recently, Wellington SPCA drew attention to translation of the five freedoms to te reo <https://www.facebook.com/wellingtonspca/posts/4730428643641759%20>

I have included the translations here for your interest:

Te noho matekai kore, mateinu kore

Freedom from hunger and thirst

Te noho manawarau kore

Freedom from discomfort

Te noho mamae kore, wharanga kore mate kore

Freedom from pain, injury, and disease

Te āhei te whakaputa whanonga māori

Freedom to express normal behaviour

Te noho matakau kore, auhi kore

Freedom from fear and distress

How has this year impacted your AEC?

The June newsletter mentioned NAEAC's interest in hearing how AECs were able to function in a lockdown situation. The email that accompanied the Newsletter included an invitation to complete a simple online survey that asks how AECs coped. We did get some replies, but we would appreciate more. The survey takes on average less than four minutes to complete. It can be found here: <https://www.surveymonkey.com/r/WVGFL98>

Nga mihi,

NAEAC member profile – Dr Mike King



Mike provides NAEAC with knowledge and experience of ethical standards and conduct in respect of animals.

Mike is a Senior Lecturer at the University of Otago's Bioethics Centre, within the Dunedin School of Medicine. He grew up in Te Puke in the Bay of Plenty and working on dairy and pig farms throughout the North Island.

Mike's academic background is in animal science at Massey University, followed by ethics, philosophy, and politics at the University of Otago. Much of his teaching and research is on animal ethics. He teaches an undergraduate animal ethics paper, which seems to be the only one in New Zealand and goes nicely with the animal law paper also at Otago.

His current research focuses on New Zealand's provisions for protecting animal welfare, with Marcelo Rodriguez Ferrere from the Otago Faculty of Law, the development of ethical frameworks for making decisions about animal use and treatment, ethical methods for infectious disease control in animals, and Māori perspectives on animal ethics and welfare, in collaboration with Māori and pākehā researchers from AgResearch, University of Otago, Massey, and University of Auckland.

As well as being a member of NAEAC, Mike is a Royal Society member on the New Zealand Board of the Australian and New Zealand Council for the Care of Animals in Research and Teaching, and the Oceania Regional Committee of the International Council for Laboratory Animal Science. Both groups aim to improve the ethical treatment of animals through their various initiatives, and by encouraging and facilitating constructive discussion and learning in New Zealand and the wider pacific region.

Aside from this stuff, Mike likes having his cats interrupt Zoom meetings, playing fetch with one of them while the other one looks on bemused, feeding birds in his garden (mostly tauhou/silvereye, the odd tui and he's hoping for more korimako/bellbirds), doomscrolling social media, and walking it off around the Otago Peninsula.

REMINDER

The Aotearoa New Zealand John Schofield Three Rs Implementation Award

NAEAC has extended the closing date for applications for the 2020 Aotearoa New Zealand John Schofield Three Rs Implementation Award until Friday 16th October.

The prize, which celebrates achievement in implementation of the Three Rs, consists of a certificate and a financial award of \$5,000.

The Aotearoa New Zealand Three Rs Award is co-ordinated by NAEAC with funding support from: The Australian and New Zealand Council for the Care of Animals in Research and Teaching.

Full terms of reference and application forms are available from the NAEAC Secretariat via email at (naeac@mpi.govt.nz).

EUTHANASIA

NAEAC has recently been discussing euthanasia best practice and NAEAC's recommendations. I would like to take this opportunity to remind you that the Good Practice Guide contains the following advice:

The method and procedures used for killing an animal must be humane and:

- i. avoid pain or distress and produce rapid loss of consciousness until death occurs.*
- ii. be compatible with the purpose and aims of the project or activity.*
- iii. be appropriate to the species, age, developmental stage, and health of the animal.*
- iv. require minimum restraint of the animal.*
- v. be reliable, reproducible, and irreversible.*
- vi. ensure that animals are killed in a quiet, clean environment away from other animals.*
- vii. ensure that death is established before disposal of the carcass, fetuses, embryos, and fertilised eggs.*

Dependent offspring of animals to be killed must be cared for or humanely killed.

NAEAC recommends that AECs refer to the American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals (see: <https://www.avma.org/sites/default/files/2020-01/2020-Euthanasia-Final-1-17-20.pdf>)

NAEAC is currently preparing, as part of its documentation upgrade, Guidelines for Euthanasia of Animals for Scientific Purposes. This will enable you to see immediately on a species by species basis techniques that are acceptable, acceptable with reservations, or NOT acceptable.

One of NAEAC's concerns is the continued use of CO₂ as a euthanasia agent in some laboratories. It is NAEAC's view that CO₂ euthanasia is outdated and should not be used routinely. NAEAC encourages all users to find alternatives to CO₂ euthanasia and advises AECs to recommend the same. An ideal review paper to read on this subject is:

Carbon dioxide for euthanasia: concerns regarding pain and distress, with special reference to mice and rats. K.M. Conlee, M. L. Stephens, A. N. Rowan and L. A. King (2005); which can be found at <https://journals.sagepub.com/doi/pdf/10.1258/0023677053739747>

Abstract

Carbon dioxide (CO₂) is the most commonly used agent for euthanasia of laboratory rodents, used on an estimated tens of millions of laboratory rodents per year worldwide, yet there is a growing body of evidence indicating that exposure to CO₂ causes more than momentary pain and distress in these and other animals. We reviewed the available literature on the use of CO₂ for euthanasia (as well as anaesthesia) and also informally canvassed laboratory animal personnel for their opinions regarding this topic. Our review addresses key issues such as CO₂ flow rate and final concentration, presence of oxygen, and prefilled chambers (the animal is added to the chamber once a predetermined concentration and flow rate have been reached) versus gradual induction (the animal is put into an empty chamber and the gas agent(s) is gradually introduced at a fixed rate). Internationally, animal research standards specify that any procedure that would cause pain or distress in humans should be assumed to do so in non-human animals as well (Public Health Service 1986, US Department of Agriculture 1997, Organization for Economic Cooperation and Development 2000). European Union guidelines, however, specify a certain threshold of pain or distress, such as 'skilled insertion of a hypodermic needle', as the starting point at which regulation of the use of animals in experimental or other scientific procedures begins (Biotechnology Regulatory Atlas n.d.). There is clear evidence in the human literature that CO₂ exposure is painful and distressful, while the non-human literature is equivocal. However, the fact that a number of studies do conclude that CO₂ causes pain and distress in animals indicates a need for careful reconsideration of its use. Finally, this review offers recommendations for alternatives to the use of CO₂ as a euthanasia agent.

THE 3RS – NEW RESEARCH FUNDING SOURCE IDENTIFIED

In 2019 NAEAC awarded the Aotearoa New Zealand Three Rs Research Grant for the first time. This fulfilled a vision to raise the profile and the value of the NAEAC Three Rs award. NAEAC had seen a gap and proactively lobbied to source funding to plug it. Two 'revamped' awards were generously supported by AgResearch Ltd, The Australian and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART), Lincoln University, Manaaki Whenua Landcare Research, Massey University, The University of Otago, and Victoria University of Wellington.

That support helped underwrite a substantial research grant aimed at encouraging reducing, refining or replacing (the Three Rs) the use of animals in research, testing or teaching (RTT), and signalled a stakeholder commitment to advancing alternatives to the use of animals for such purposes. By committing to the award, a group of organisations, that use and care for animals in RTT showed they were prepared to help fund research aimed at the Three Rs. This helped indicate to the public, and to the Government, a positive and responsible approach to the way New Zealand manages those animals. It also showed that those organisations seriously value Three Rs principles and have listened to the public's concerns in this area.

The inaugural Aotearoa New Zealand Three Rs Research Grant was awarded to Dr Damian Scarf of the University of Otago. The calibre of the applications for that award was extremely high, and several were worthy of support. Recognising the quality of the applications, Hon Pete Hodgson (the then Chair of ANZCCART (New Zealand), and who had originally tabled the members' Bill which subsequently became the Animal Welfare Act 1999), took a selection of (anonymised) applications to the Minister responsible for Animal Welfare, Hon Damien O'Connor, as evidence of New Zealand's capacity and demand for Three Rs research. Pete requested that Government support be made available to underwrite such work. The Minister responded favourably and indicated a Government funding stream which could be accessed.

NAEAC subsequently resolved to defer to this central funding for the time being and to therefore move away from seeking funds to support Three Rs Research. While the Three Rs principles fall well within NAEAC's statutory function, being an active research funder is technically outside the Committee's mandate. Furthermore, the central Government fund is greater than the committee had the capacity to raise and did not require the contribution of funds from research organisations, which was advantageous.

Minister O'Connor identified the Sustainable Food & Fibre Futures (SFF Futures) fund as a source of investment from central government for research involving the Three Rs. NAEAC has therefore resolved that it no longer needs to offer this award under its own name. NAEAC has been assured by MPI that Three Rs applications will be considered under SFF Futures criteria, funding is available immediately and applications can be made at any time.

Expressions of interest for Three Rs funding should be made in writing to Natasha Telles D'Costa, Principal Adviser, Investment Programmes in the first instance.

Natasha's email address is Natasha.TellesDCosta@mpi.govt.nz and she will be able to provide further information on the application process.

NAEAC encourages anyone who has a proposal for a research project to address one (or more) of the Three Rs to make enquiries regarding accessing this fund.

MAKING USE OF LOCKDOWN

The story of the creation of a logo and the webpage that followed: contributed by Vanessa Borman, Animal Ethics Coordinator, AgResearch

Finding an identity

Covid-19 lockdown hit in March 2020.

With all the family now working from home a strange kind of calm routine descended. The bread maker was dusted off, YouTube yoga videos were watched daily, online food shopping became my much-preferred system and long walks (now a continuing regular event) were taken with our dog on beautifully tranquil country roads normally too car treacherous to contemplate.

Around mid-April, work was steady but with many studies on hold and with an hour extra available without the daily commute, an idea came to use the extra time to create a logo representing AgResearch's Animal Ethics Committee (AEC). A catalyst for this was to create a specific identity for a committee that is independent and external to AgResearch. It would also help to raise the profile in communication with both internal and external parties, some of whom knew little about what animal ethics is.

The new logo started off with a circle to compliment the AgResearch square, then the circle became a magnifying glass; with part of the word animal magnified to represent the scrutiny by the AEC and the handle becoming a fulcrum to represent the balancing of ethical decision making when using animals for research. Once a basic image had been drafted, I realised I needed support to make the logo look professional.

Fortunately, lockdown also facilitated regularly (socially distanced) chatting to neighbours over the fence. During conversation, one kind friend offered to help as he had access to an online art package and twenty something years' experience using it. He drew a first re-draft and then I added the animals.

The only thing now missing was a Māori phrase. With much support and at very short notice on his day off Chris Koroheke (Kaiurungi, Maori Strategy & Engagement Manager) gave his time and wonderful ideas to the creation of: **Te Ara Matatika Koiora**.

It is best I let Chris explain in his own words its meaning "..... Te Ara Matatika Koiora - at its heart is the kupu (word) matatika. Matatika has the following meanings and connotations in the English language - to be ethical, fair, honest, impartial, unbiased, upright. And te ara means "the pathway" or even a "way of being". Koiora refers to living entities and beings. So, the phrase to me lends itself to the sentiment - the ethical way of being with living entities, in this case, animals. "

Next the AEC Chair (Jim Webster) and I approached our Media Team for advice and approval (*probably the wrong way around, but the logo design and its professional look had all happened so fast*); font changes were suggested, skilful adjustments to the design were made and finally; the logo was born.



One mouse click: – two significant outcomes

AgResearch has committed to openness about the research it does involving animals, but it was apparent that there was not much information available to the public.

The first issue we became aware of was that there was very little information for people to understand if they needed ethical approval for work they were intending to undertake or to find a way to contact an animal ethics committee if they did not have access to one.

I confirmed this by taking an external viewpoint and searching the internet for information. Nowhere could I find anything linking AgResearch to Animal Ethics or an AEC.

This prompted a second idea; why not have a page on the AgResearch public website that would address this need ...and... the Animal Ethics new logo had another place to be seen by the world.

A webpage was created: <https://www.agresearch.co.nz/animal-ethics> and has been live since 22 June 2020... just two months after I had emailed the first embryonic logo draft to Jim.

The logo on the webpage has the added function of being a hyperlink to the Animal Ethics System for internal and parented users and by external applicants saving the webpage they have access to numerous resources to help guide them.

This success of the logo and webpage that followed was due to the continual support, advice and encouragement from Dr Jim Webster and the support of AgResearch.

Now, thanks to our external connections, a link to this webpage is also available on the MPI website: <https://www.mpi.govt.nz/protection-and-response/animal-welfare/animals-in-research-testing-and-teaching/>

Thank you to everyone that helped make this creative journey during lockdown happen. We would be happy to discuss this further with anyone contemplating doing something similar, to raise the profile of animal ethics in your own organisation.

vanessa.borman@agresearch.co.nz

COMPASSION FATIGUE *(extracted from NC3Rs Newsletter [August 2020](#))*

For many animal technicians bonding with animals is easy, but breaking those bonds when animals are unwell, or an experiment comes to an end is not.

Similarly, being exposed to situations where animals are distressed or in pain can take a large emotional toll on those responsible for their welfare. The emotional and moral stress that arises in these circumstances can result in compassion fatigue, which is often referred to as 'the cost of caring'.

Symptoms of compassion fatigue can range from frustration at work to intrusive thoughts and depression. As well as negatively affecting individuals, it also limits the standard of care that staff are able to provide. It is therefore important for the animal research community to recognise compassion fatigue, identify those at risk and provide strategies and support to alleviate its effects. Laboratory animal care staff are a new focus of compassion fatigue research. Recent publications give insight into which roles are associated with a higher risk of [compassion fatigue](#) and provide suggestions for reducing its effects in the [research environment](#).

The NC3Rs and the North American 3Rs Collaborative (NA3RsC) recently hosted a webinar focused on animal technicians and compassion fatigue. You can view the webinar at: <https://vimeo.com/452161253/d315a1b44f>

CODE OF ETHICAL CONDUCT REVIEW PROCESS

As part of the development of its Strategic Plan for 2019-2024, NAEAC stated its vision is *providing world-class leadership that underpins the ethical use of animals for research, testing and teaching in New Zealand.*

The plan specified a need to streamline the Code review process and advice to animal ethics committees, whilst in order to ensure the system is trusted it was identified that it is necessary to ensure effective monitoring of Codes and operational activity.

In the Operational Plan that underpins the Strategy, NAEAC set an objective of improving code reviews, which requires refinement of current processes to gain greater clarity of roles in the complete process of Code review and consideration.

This objective also contributes to reviewing the operation of Part 6 of the Animal Welfare Act that is identified under the priority 'to strengthen Codes' in the Government's [Framework for Action on Animal Welfare](#).

Scope of review: A review of the process taken to approve Codes of Ethical Conduct, including the review of codes by accredited reviewers, NAEAC processes as part of the approval, and MPI processes as part of the approval. This includes reviewing:

- Performance of reviewers (including but not limited to consistency across reviews and reviewers);
- Systems and processes for appointment and performance of reviewers (e.g. processes for MPI audits; Performance Standards); and
- Requirements and guidance for reviews and reports (e.g. templates; *Good Practice Guide*; Codes of Ethical Conduct and the Animal Welfare Act 1999).

AEC INNOVATION AND DISCOVERY

This is a new section in the newsletter. It is your opportunity to share new ideas and/or processes that your AEC has introduced to improve the way the committee functions, new techniques, improvements to routine methodologies, identify positive animal welfare outcomes etc. If you have something that you would like to share, please send your contribution to the NAEAC mailbox: naeac@mpi.govt.nz

AgResearch AEC has recently introduced an improvement to the way it records monitoring visits.

The system is based on a free app called [iAuditor](#). The app interface can be customised for your own purposes. In AgResearch's case, the app is placed on an iPad and has customised fields in a user designed format. This enables recording of simple text, provide check boxes, offer dropdown lists record photographs from the device itself or accept external uploads etc. When the visit is finished the output can be converted and stored as a pdf.

AgResearch operates an electronic animal ethics system and the pdf can be attached to an existing Monitoring Form, which also includes editable fields so that further comments can be attached. If the visit is in relation to an approved application the form is 'parented' to the existing application form, maintaining an audit trail within the system.

AEC Chair Jim Webster says the new form has streamlined and formalised the monitoring process and is very user friendly. If you would like more information contact jim.webster@agresearch.co.nz

FROM NAEAC'S MINUTES

This regular section in the NAEAC newsletter includes snippets from recent meeting minutes that I hope you find interesting.

NAEAC Documents

The committee has resolved to specifically target updating its document library.

It was also resolved to amend the operational plan to include the development of one-page flow diagrams to aid decision making by both committees and personnel who use animals for RTT.

Good Practice Guide for the use of animals in research, testing and teaching (GPG); new and updated information has been added to the Guide and it is now awaiting publication.

A Guide for Lay Members of Animal Ethics Committees material from this guide has also been incorporated into the GPG. Information from the recently published fish occasional paper had also been incorporated into the current revision.

A Culture of Care a revision of this publication has also been reviewed by the committee once it is finalised it will be passed to MPI Communications for publication.

Euthanasia of Animals for Scientific Purposes. Prof Bronwen Connor volunteered to revise the 2001 edition of this ANZCCART publication. Other committee members with expertise in species other than rodents have also contributed, and the revision will also cover production animals, fish, cats, dogs, horses, and vertebrate pest species. Progress is referred to elsewhere in this newsletter.

Flow-charts

NAEAC is currently preparing a series of flow charts to aid decision making.

The first two to be ready for circulation are “**Do I need Ethical Approval?**” and “**How should this Project be graded?**”

Over time the flowchart library will be updated and added to it is NAEACs expectation that these documents will have a wide application and will be useful to AECs, researchers and accredited reviewers.

The CEC review process

A subcommittee has been considering the CEC review process. At the September meeting, the sub-committee provided an update containing information on the scope of the review they were undertaking and the work to date that had been completed. It was noted that the reviewer's checklist has been amended to include information from the code template. The subcommittee sought feedback from NAEAC on this before it would be sent to accredited reviewers for comment.

Committee member attendance at AEC meetings.

All NAEAC members try to attend a selection of AEC meetings during the year in an observer's capacity. These attendances are not a review or audit, but simply a way for NAEAC members to familiarise themselves with how AECs are operating.

One area that has become apparent is how NAEAC offers training and support to new AEC members and this has been flagged as an area for NAEAC to address in the new year.

AEC contact details

Please remember to inform Linda Carsons (linda.carsons@mpi.govt.nz) if details for your AEC's contact person change.

Dates for your diary

16th October – Closing date for applications for The Aotearoa New Zealand John Schofield Three Rs Implementation Award

~~10 November 2020~~ – “Getting it right” NAEAC AECs Virtual Workshop. **Cancelled**

July 2021 – “Openness in Animal Research” ANZCCART Conference, Queenstown

Contacts:

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