NAEAC Newsletter October 2021

Comment from the (retiring) Chair of NAEAC

Kia ora

This will be my final newsletter to AECs. On 31 October, my appointment as Chair of NAEAC expires. The Chair of NAEAC also sits on the National Animal Welfare Advisory Committee (NAWAC), so it has been a busy six years!

The inclusion of the phrase "...to recognise that animals are sentient:" in the 2015 revision of the Animal Welfare Act 1999 is probably the most significant contribution to animal welfare in Aotearoa, New Zealand, in the past decade.

In November 2017, NAWAC and NAEAC joined to host an Animal Sentience Workshop in Wellington, to consider how to give effect to animal sentience under the Animal Welfare Act and potential implications for the work of the two committees.

The notion of animal sentience was also the catalyst for a hui in June 2018, which gathered animal advocacy groups and individuals, at Manurewa Marae in South Auckland. The hui was called by Hon Meka Whaitiri, the Associate Minister of Agriculture with responsibility for animal welfare. I attended and spoke on behalf of NAEAC and NAWAC.

I noted that over the past 50 years there has been significant change in the way we manage our interactions with animals. That change came about because people advocated on behalf of the animals.

I stated that I sincerely believe that, although we come from different perspectives, the two advisory committees have an animal advocacy role in the same way that animal rights activists do.

NAWAC and NAEAC augment that advocacy of animal rights activists by providing objective, contextual advice in relation to the legislative and regulatory control of animal use and welfare.

The hui was a catalyst for dialogue between NAEAC and the New Zealand Antivivisection Society (NZAVS) and I believe it was significant that Tara Jackson (Executive

Director of NZAVS) and I (Chair of NAEAC), stood beside each other in the photo taken at the close of the day.



The dialogue has continued, and an easing of tensions has seen NZAVS, and some institutions meet and collaborate; especially in rehoming initiatives.

Fundamental differences have not been, and are unlikely to be, resolved but at least there is a conversation.

At the recent Australia and New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART) Conference in Queenstown, for the first time, representatives of the NZAVS spoke to ANZCART delegates who are intimately involved in the manipulations, the scrutiny of protocols and the welfare and monitoring of the animals that are used in research, testing, and teaching in New Zealand.

I sincerely hope that the dialogue continues in a mutually respectful way, and I am certain that the animals will continue to benefit.

Thanks

As I end my term as Chair, I want to thank the dedicated committee members I have served with – past and present – noting that Prof. Bronwen Connor and Dr Craig Gillies, also retire from NAEAC at the end of October. I also thank the past and current staff of MPI who give NAEAC such invaluable support; especially the committee secretary Paula Lemow. And last, but by no means least I thank you; the AEC members who tirelessly protect the welfare of the animals used for research, testing and

teaching. Nga mihi,





NAEAC member profile – Dr Nita Harding

Dr Nita Harding's appointment to NAEAC recognises the need for veterinary expertise on the committee.

Nita is a Massey University graduate and during her career has worked in clinical practice in New Zealand and the United Kingdom, as well as holding various roles within industry and government.

While she has mostly worked in the livestock sector, Nita has always had an

interest in animal welfare, and the use of animals in research, testing, and teaching. Nita has been an AEC member for over 20 years.

Nita was the first accredited reviewer of animal ethics committees appointed and carried out reviews for a 10-year period.

Nita currently works in the Animal Welfare team at MPI and provides support to the Sector Liaison team whose role is to provide resources and information to animal owners and industry stakeholders mostly in the livestock sector. Her previous roles have included work on animal health and welfare issues, biosecurity, disease control programmes, animal import and export quarantine work, and work in the meat industry.

For relaxation, Nita likes to spend time in her garden, go walking and to be creative with fabrics and fibres. When she is not working or undertaking her NAEAC duties, Nita's home life is shared with her husband, an elderly Labrador, Sally, and a not so elderly cat, Sheldon (who is a bit eccentric).

THE 3RS

On 13 July, the NC3Rs <u>https://nc3rs.org.uk/</u> launched two online 3Rs self-assessment tools that research groups and institutions can use to collate, track and benchmark their 3Rs activities <u>https://3rsselfassessment.nc3rs.org.uk/</u>.

These interactive tools, which are secure and free-to-use internationally, help researchers, ethics committee members and others to identify and implement 3Rs opportunities.

Leaders of research groups and institutions who want to ensure an optimal 3Rs culture need to be able to evaluate their current activities, understand their strengths and establish what should be improved and how.

Through consultation with the scientific community, NC3Rs developed two tools. Each tool consists of a series of questions on the 3Rs, divided into categories that reflect the breadth of potential 3Rs activities across distinct levels. Complete the question set and the system will automatically score your responses for each category and provide bespoke feedback. Scores and feedback are confidential and can only be accessed by the approved lead-user for the research group or institution.

Benefits include:

- Getting a realistic evaluation of your 3Rs activities: Scores can be used internally to allocate resource and effort and to focus discussions at group meetings or in the local ethics committee to the most critical areas and topics.
- **Demonstrating your commitment to the 3Rs:** Should you wish to share externally, scores can be included in grant proposals and applications to use animals, or as part of discussions with regulators and wider communications with the public.



DEVELOPING NEW THERAPEUTICS AND VETERINARY MEDICINES

Contributed by the ACVM team, MPI

Research and trials are integral to the development of new therapeutic options for the health and welfare of animals. To ensure the animal welfare, public health, residue, and trade risks are being appropriately managed in trial work involving animals, pharmaceutical companies and researchers are required to obtain approval under the Agricultural Compounds and Veterinary Medicines (ACVM) Act.

ACVM authorisation is required for all agricultural compounds before they can be used on animals. Authorisation of an agricultural compound, which is a substance used in, on, or around animals to manage the animals or their environment, can take the form of either registration, exemption from registration, or approval in special circumstances. If a compound is registered as a veterinary medicine and is being used in a way that conforms to that registration (either as per the label or offlabel where that is not prohibited), then a trial-specific approval is not needed. Similarly, if a product is deemed exempt from registration by conformance to the ACVM (Exemptions and Prohibited Substances) Regulations, then an additional approval is not required. All other compounds, including those registered veterinary medicines restricted to on-label use only, will require a trialspecific approval before any trial work begins.

There are two kinds of trial-specific approvals that can be granted under the ACVM Act: research approval and provisional registration. The two types of approvals are similar in how they are applied for and granted, with the difference being that research approvals are granted for compounds still being developed while provisional registrations are granted for final formulations where companies are looking to generate data to support registration.

Both kinds of approvals are:

- limited to trial work only (cannot be sold to vets or the general public),
- have specific conditions of approval that must be followed restricting how and where they can be used, and
- require Animal Ethics Committee approval is in place prior to the start of any trials.

The first step in obtaining a research approval or provisional registration from MPI is the submission of a product data sheet (PDS). The PDS includes all details of the intended trial including:

- Details of the compound to be investigated, and how it will be used;
- Why the trial is being conducted, and what it is intending to investigate;
- All animal details: species, animal numbers, and monitoring plans for all test and control animals;
- Where the trial will take place and who will be responsible;
- How risks associated with the compound will be managed (procurement, storage, and disposal); and
- Residue risk management for food-producing species, including residue data where available.

The ACVM team, NZFS MPI then evaluate this information to determine the controls applied to the approval to manage the risks associated how the compound itself will be procured and used, as well as the risks associated with residues in food-producing animals. The trial information is not evaluated to confirm it will produce valid and statistically significant data, since this does not affect the risks associated with the compound's use or residues management.

It is important to note that the ACVM approval relies entirely on AEC approval to manage the animal welfare risks associated with a trial plan. ACVM do not assess animal welfare risks associated with trial plans, and instead mandate AEC approval is in place and maintained throughout the trial work. Trials cannot commence or continue without a valid AEC approval in place, and any changes to the trial formulation or trial details will trigger a requirement that both a new ACVM approval is issued and confirmation that a revised AEC approval is in place.

For more information on ACVM research approval and provisional registrations please visit the pages on the MPI website, or contact the ACVM team at approvals@mpi.govt.nz

- Provisional Registration of a Veterinary Medicine
- Authorisation of veterinary medicines under special circumstances.

INTERESTING NEW PAPER:

Alternatives in Education—Rat and Mouse Simulators Evaluated from Course Trainers' and Supervisors' Perspective <u>https://www.mdpi.com/2076-2615/11/7/1848/htm</u>

Simple Summary

Simulators for training in laboratory animal science bear great potential to overcome the dilemma between the present demand for high-quality practical training involving live animals whilst implementing the "3R principle" (Replace, Reduce, Refine) according to the Directive 2010/63/EU.

Currently, one mouse and six rat simulators are available, but only few data on them exist. To advance simulator-based training, an online survey for course trainers and supervisors of laboratory animal training courses focusing mice and rats was conducted, as these groups are most aware of its implementation due to applying alternative education and training methods regularly. This study reflects the current awareness, implementation, and satisfaction concerning methodical and practical criteria of the simulators including the requirements for a new development of thirty-five course trainers and supervisors who completed a German online survey conducted between May 2018 and June 2019.

Although the study revealed a high awareness of existing simulators, their implementation is rather low, perhaps due to them not meeting certain demands.

Generally, an approval of simulator-based training and a demand for user-optimized, realistic, financially affordable, and robust rat and mouse simulators were indicated, which may strongly benefit the 3Rs and animals in all experimental areas.

Compassion fatigue

People often talk about the physical, emotional, and psychological impacts that lab animals are subjected to in the name of scientific progress – impacts that include but are not limited to disease, injury, stress, trauma, depression and, in an overwhelming number of cases, death. Much less is said about the effect such things have on lab workers: those people whose job it is to *induce* the disease, *inflict* the injury, restrain, operate upon, and euthanize the animals – not just because their research depends upon it, but because society at large will, all going to plan, benefit.

The following article may be of interest: https://jme.bmj.com/content/medethics/early/2021/03/30/medethics-2020-106945.full.pdf

Animal Tissue Sharing website launched at Massey University

Neil Ward and Juliet Cayzer, Massey University

Researchers, technicians and teachers at Massey University's veterinary, animal science and agriculture schools have historically sourced animal tissues for their work by word of mouth within the institution.

Occasionally, abattoirs have also been used but this is becoming more difficult to organise. Neil Ward, a senior technician in the School of Veterinary Science, was part of this informal network and for many years saw value in developing a more formal system to comprehensively facilitate the sharing of animal tissues, over a wider group of people.

In 2020, Neil sought support from Massey's Information Technology Services to develop a website database for this purpose. The project was approved, and a team of twenty-one people at Massey have contributed to the development of the website.

The sharing of animal tissues is a concept that is promoted by the National Animal Ethics Advisory Committee. 'The Good Practice Guide for the use of animals in research, testing and teaching' states, 'Investigators and animal carers should ensure that, if practicable, tissue samples from animals that have died or been humanely killed are provided or made available to other investigators for their work or deposited in a tissue bank for subsequent distribution.' (Section 7.4.9). The initiative applies the 3Rs principles of reduction and replacement.

Our intent is that the site will increase the beneficial outcomes from these animals, with no additional cost to the animals themselves. We also hope that it will reduce the number of animals that are killed for research and teaching purposes.

The website is hosted by Massey. Initially, the site will be available only to Massey staff, but it is anticipated that with time, access to the site will be made available to people from other research and teaching organisations in NZ. Access is restricted to site members.

Neither the identity of users, their institutions (when membership opens to external organisations), nor the nature of experiments, are revealed on the website.

The availability of tissues following planned euthanasia are posted on the site in advance of the euthanasia. Tissue banking is not required by the system. Other research and teaching personnel who may have a use for these tissues can express interest in discussing details relating to the tissues with the person offering. The person offering the animal tissues can then contact the person requesting tissues; discussions will occur at the discretion of both parties and outside the website.

If a member wants a particular tissue that is not currently listed, the member can instruct the system to notify them (by email) if tissues from that species are subsequently offered. This eliminates the need to regularly monitor the site, looking for postings of this tissue type.

Members are requested to log successful shares into the website to enable the usefulness of the system to be captured.

Data on the number of tissue-offers and number of expressions of interest in receiving tissues will also be able to be extracted.

Extending membership to personnel in other research, testing and teaching institutions will facilitate wider collaborative relationships and make greater use of tissues obtained from euthanased animals.



Neil Ward - photo supplied

Seeking a lay person nominee for your AEC

Some code holders find it difficult to fill the external statutory membership positions on their AEC. The NZVA has an internal policy that their nominee is a currently registered veterinarian, and the SPCA (approved organisation) requires that its nominee is a current member of SPCA. For both, it can be problematic to elicit a nomination because of the difficulty in finding a person who can commit time away from their employment.

A local authority nominee is often even more challenging to find. NAEAC was recently asked for advice after two local authorities each declined a code holder's request for a nominee on the grounds that their teams were fully committed, and they were not prepared to release someone for the role.

Most local authorities tend to assume that they are being asked to appoint someone to an AEC and that the person should be from within their own ranks. That is incorrect, and therefore, your letter asking for a nomination should be written carefully.

The Animal Welfare Act (Part 6) s101 requires that:

- (8) One member must be a person appointed by the code holder on the nomination of a territorial authority or regional council.
- (9) The person appointed under subsection (8) must not be—
 (a) a person who is in the employ of, or is otherwise associated with, the code holder; or
 (b) a person who is associated with the scientific community or an animal welfare agency.

The intention is to secure a lay position on an AEC by appointing a person who is completely independent of science, has no formal animal welfare affiliation, and who represents the community. The Act specifies that the role requires nomination from a local authority, therefore you cannot request nomination from a community organisation such as a Service Club.

Appointments are made by the code holder. You are simply asking for a nomination who must meet the requirements of s101 (9). The nominee is not required to be a sitting member, or staff of, the nominating body.

You may know a person who would is suitable and be able to offer a name, although the local authority is free offer any alternate name if they choose.

When requesting a local authority nominee for your AEC remember to cover these points:

- refer the authority to s101 (8 and 9) of the Animal Welfare Act 1999 (the Act)
- clarify that they are not necessarily being asked to nominate a member of the council or its staff (it may be useful to note that councillor's commitments may with AEC meeting dates, and that council business would take priority, therefore nominating an appropriate member of the community would benefit both the authority and the code holder)
- if you have a name offer it, noting that the person meets the requirements of s101 (9), and has indicated a willingness to be nominated
- ask that the authority confirm the name provided as their nominated lay person to your AEC in accordance with the requirements of the Act

Rehoming

NAEAC is developing guidelines for the rehoming of animals from institutions involved in research, testing and teaching, based on the New South Wales Guidelines, which can be seen at: https://www.animalethics.org.au/ data/assets/pdf_file/0005/1275251/Research-Animal-Rehoming-Guidelines.pdf

NAEAC would appreciate input from any codeholder who has rehomed animals. The animals may have been used in an experimental protocol or have been bred for RTT but not used for a variety of reasons. If you would be willing to offer your help please contact NAEAC at: naeac@mpi.govt.nz

Rat tickling to improve animal welfare

Dr Sabina Darke, Clinical Services Veterinarian, Erin Wood, Behavioural Technologist and Dr Jodi Salinsky, Animal Welfare Officer, University of Auckland

In January, the NC3Rs hosted a <u>webinar on Rat Tickling</u>. This is a positive handling technique designed to improve the welfare of rats and increase the human-animal bond. The <u>NC3Rs</u> <u>homepage</u> provides a wealth of information on Rat Tickling including the webinar, FAQs, references, and link to the certification course.

Dr Megan LaFollette explains in her webinar how rats play with each other in a rough and tumble manner. Conspecific play in rats is based on three features 'the dorsal contact,' 'the flip' and 'the pin' and she demonstrates how we can use these contacts to engage in play with them. Starting with a plush toy is recommended to avoid unintentional animal welfare issues. Three days of 15-30 second interactions are enough to show benefits in future handling sessions. Other methods of handling may also create positive interactions with people, but this method can do so quickly and efficiently.

Younger rats play more than older rats, and rats older than 90 days are more difficult to get started. Only experienced Rat Ticklers should work with these animals. Animals that should not be tickled include rats with pups, breeder males, animals used for anxiety or stress research or extremely stressed/aggressive rats.

Having been informed about this 'new' technique a small number of interested staff at the University of Auckland formed a group to share their experiences and learn together. The first step was to gain the free <u>Certificate in Rat Tickling</u> from the University of Purdue and then practice on plush toys. It was valuable to work in a team and enabled the correction of techniques from the recommendations.

Most rat conspecific communication occurs at ultrasonic frequencies undetectable to human ears. Vocalisations at around 20 kHz are made if the rat experiences something painful or unpleasant. Vocalisations around 50 kHz are made during play or other pleasant experiences. This frequency range can be measured with special devices (e.g., bat detectors).

Bat detectors enabled us to hear the 50 kHz trills (giggles for a better word) that the training rats were performing while being tickled. The reaction of people listening to the giggles demonstrated another benefit of the engagement, as it provided a positive experience for staff. Although not all rats giggled, none of the animals made noises in the painful or unpleasant range.



Information on rat ticking indicates that even if the tickling cannot or should not continue in animals after certain treatments or surgeries, it continues to benefit animal welfare. At the University it was also found that when rats could not be physically flipped and pinned after surgery or instrumentation, that the benefits continued when established prior to surgery. This positive handling technique is very much worth investigation and an excellent Refinement initiative for many rats.

Image credit: Bristol University

For some of our research groups, Rat Tickling has now become a valuable part of their routine acclimatisation of animals.

ANZCCART notes

The recent ANZCCART Conference in Queenstown was both well attended, and highly successful.

Although there was only one Australian delegate who attended 'in person', the use of electronic media resulted in one of the largest conferences ever, and remote delegates outnumbered those attending on-site.

The programme was interesting, varied, and provocative. A significant sign of progress was the inclusion of speakers from NZAVS both in presentations and in a debate on the Forced Swim Test.

The 2021 conference considered 'openness' in animal research and teaching.

To gain a broad perspective on how openness looks in practice, the conference examined overseas examples, both success stories and failures, and learned from different cultural viewpoints.

On the final day of the Conference, Associate Professor Siouxsie Wiles and Dr Jodi Salinsky launched the <u>Openness Agreement on Animal Research and Teaching in New Zealand</u>, the first such agreement to be launched outside Europe.

As inaugural signatories, twenty-one universities, institutes of technology, non-profits, Crown Research Institutes, government organisations, umbrella bodies, research funding organisations and learned societies have committed to communicate openly about animal use.

The objective of the Agreement is to ensure that the public are well informed about animal research (including the benefits, harms, and limitations).

New Zealand's agreement is modelled on the UK's 2014 ground-breaking Concordat on openness on animal research led by Understanding Animal Research. Similar agreements followed in Spain, Portugal, Belgium, and France, with the assistance of the European Animal Research Association.

The twenty-one signatories have formally agreed to the Openness agreement's five commitments:

- 1. We will be clear about why and how we use animals in research and teaching
- 2. We will enhance our communications with the media and the public about our use of animals in research and teaching
- 3. We will enhance our communications with tangata whenua about our use of animals in research and teaching
- 4. We will be proactive in providing opportunities for the public to find out about research and teaching using animals
- 5. We will report on progress annually and share our experiences.

The agreement was prepared by a multi-organisational working group, reviews were provided by the ANZCCART NZ Board and there was a twelve-week public consultation in early 2021.

The inaugural signatories are:

AgResearch
ANZLAA
AstraZeneca
Auckland Zoo
AUT
Callaghan Innovation
Department of Conservation
Lincoln University
Malaghan Institute
Massey University
New Zealand Veterinary Association

NIWA Otago Medical Research Foundation Royal Society Te Apārangi SPCA NZ Te Herenga Waka - Victoria University of Wellington Te Pukenga - New Zealand Institute of Skills and Technology University of Auckland University of Canterbury University of Otago University of Waikato

FROM NAEAC'S MINUTES

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

AEC service award nomination form

From time-to-time NAEAC issue a certificate that recognises an individual's contribution to an AEC. These awards can be made at any time following a nomination from the AEC or code holder. Historically, nominations have been received via an *ad hoc* email.

NAEAC has developed a nomination form that can be downloaded and, on completion, forwarded to the secretary. The nomination form can be found at:

https://www.mpi.govt.nz/dmsdocument/45439-NAEAC-AEC-Service-Award-nomination-

Compass Training Initiative

ANZCCART Board (and NAEAC) members Arnja Dale and Mike King recently provided an update on the ANZCCART Compass training initiative. The free online training modules relating to animal use in research and teaching are available for people across Australia and New Zealand. More New Zealand related content should be available within six months.

The programme can be accessed here:

https://anzccart.adelaide.edu.au/compass

Animal use for practising surgical techniques

NAEAC recently discussed the use of animals for teaching non-recovery surgical technique.

In one organisation, some veterinary feedback after training sessions considered that there could have been more emphasis placed on the contribution these animals had made to the surgeons' development.

It was noted that sometime afterwards, surgeons were themselves surveyed and provided helpful feedback on what the training provided them.

The committee considered it might be useful to ask AECs how they approach non-recovery

surgery training, including preliminary work with surgeons.

It was agreed to add surgical models to the NAEAC subcommittee programme with the objective of providing some guidelines on the subject. Nita Harding, Bronwen Connor and Arnja Dale have agreed to be on the working group.

Euthanasia guidelines

NAEAC has been updating its euthanasia guidelines to include production animals and wildlife/feral species.

Euthanasia guidelines for fish are also being explored.

The current guidelines include a heading for 'invertebrates' but there are no recommended euthanasia techniques currently listed under it. Also missing was information relating to the euthanasia of rabbits. The updated document will be available soon.

AEC contact details

Please remember to inform the NAEAC secretary whenever the details for your AEC's contact person change.

Dates for your diary

November 2022: AECs Workshop Date and venue to be advised.

Any time – expressions of interest with proposals relating to Three Rs research to the Sustainable Food & Fibre Futures (SFF Futures) fund. Contact: SFF.Futures@mpi.govt.nz>

NAEAC Contacts:

Chair:tbcSecretariat:naeac@mpi.govt.nz