

PORTFOLIO COMMITTEE NO. 2 - HEALTH

INQUIRY INTO USE OF PRIMATES AND OTHER ANIMALS IN MEDICAL RESEARCH IN NEW SOUTH WALES

HEARING – 1 JUNE 2022

SUPPLEMENTARY QUESTIONS TO UNIVERSITY OF WOLLONGONG

Please note that whilst I, Sarah Toole, Animal Welfare Officer at the University of Wollongong am providing information about the arrangements at the University, the opinions expressed in question responses are my own and not official university opinion, guideline or policy.

1. Are you aware of any projects ever being approved with the intention of educating and training honours students in research protocols, overseen by a more experienced researcher?

At UOW the majority of training is conducted by a technical officer or the animal welfare officer. We do sometimes have more experienced researchers provide training to members of their own research team, but this has to be approved by the AWO after the researcher is assessed as being suitable to provide that training as per best practice techniques.

All researchers who will be working with animals, including honours students, MUST undertake training in general health and welfare assessment and general handling (not including restraint) i.e., everyone must be able to calmly transfer an animal from a cage to a weigh container and back.

There are currently 2 approved protocols that are purely training protocols. These protocols have the Animal Welfare Officer and a Senior Animal Facility Technical officer as the Principal and Alternative investigators. The purpose of these protocols is to allow us to hold animals for use in training researchers, including honours students, in procedures which are approved for the protocols on which they are named. They are not run as general skills training and we do not conduct large general introductory group training sessions. Anyone that requests practical training in animal handling, animal health and welfare checks or animal procedures, i.e., medication delivery, disease induction, anaesthesia, surgery etc, must be named on an existing approved Animal Research Authority.

At UOW we do not normally train Honours students in any injection techniques. Occasionally it is necessary for a student to be trained in injections or more advanced techniques such as anaesthesia. This will only happen at UOW if the research team can demonstrate a need for that honours student to participate at that level. The normal practice is for other members of the research team or one of the facility staff to perform those tasks. This year due to staff shortages we have trained one Honours student in anaesthesia and subcutaneous imaging. This was considered to be justified as the project the student was involved in was imaging a cohort of mice 2 to 3 times a week for 5 to 6 weeks.

In addition, if an honours student is responsible for checking animals unaccompanied by a more senior member of their team, and/or outside of normal technical officer working hours, they must be trained in a humane killing technique suitable for the species. If they are not trained in this they cannot access the facility independently.

Should there be some kind of restriction state-wide to ensure that projects that are replicated simply for honours-student education are limited in some ways? If so, please explain.

It is necessary to have training protocols approved so that all researchers, including Honours students, can be trained in the assessment of health and welfare as well as research techniques. This ensures that people are capable and competent before handling research animals. Restricting training protocols is likely to lead to poor welfare of research animals and poor research outcomes. Rather than restricting

projects consideration should be given to restricting the types of procedures in which Honours students may be trained and consider limiting these to general handling, minor restraint, health and welfare assessment, humane killing and tissue collection.

But I do believe that there should be guidelines in place to prevent mass training days where students are handling animals without those students having a justified reason to undertake that training ie they must have an active role in a project on which they are named as a co-investigator or support person.

2. What welfare initiatives has the University of Wollongong implemented in regards to animals used in research that seem to be working?

- Restricting the types of procedures that Honours students can perform.
- Ensuring that where possible training is provided by Technical Officers and /or the Animal Welfare Officer to ensure there is no technique drift and due attention is paid to using best practice techniques.
- Independent competency assessment i.e., a person independent of the person that provided the training generally conducts the formal competency assessment.
- All animals that are showing any symptoms that are not expected at a certain stage of a protocol are reported to the AWO for assessment.
- Ongoing review of all approved monitoring and intervention sheets by the Animal Welfare Officer, AEC and research groups to determine if endpoints can be adjusted to improve animal welfare or lessen the impact on animals.
- Offering refresher training or practice sessions to all researchers prior to commencing an experiment, particularly where there has been a period of some months of not performing a technique, to ensure the personal can perform a technique appropriately prior to commencing with the experimental animals.
- Ensuring that funds are available to the AWO to allow proper investigation of all adverse and unexpected events, including funds for histopathology and laboratory testing (many institutions only perform gross post mortem exams without further laboratory testing which does not always allow the cause of an unexpected event to be determined).

Are there any changes you think are particularly important, which you think could benefit animal welfare elsewhere?

- Animal welfare is improved by ensuring the Animal Welfare Officer and animal facility staff are given sufficient authority to intervene if they feel that animal welfare is compromised.
- It is important to have people that are experienced with the species involved in the development of protocol specific monitoring and intervention sheets. In many cases the researcher may submit a monitoring and intervention sheet to an AEC and that AEC may not have a Veterinarian familiar with that species reviewing the protocol. This can mean that inappropriate intervention points are approved. There is often a trade-off between the scientific endpoint that the researcher would like and the level of welfare compromise.
- Involving the technical staff that work in the facility in the development of monitoring and intervention sheets is also recommended as these are often the people that are most familiar with day to day changes in the animals.
- Institutions should have an Animal Welfare Officer with veterinary qualifications on staff. This person should attend AEC meetings to advise the AEC on the impact of protocols and make any recommendations to lessen the welfare impact.
- Ensuring there are sufficient funds available to thoroughly investigate adverse and unexpected events is also important.

3. Are there any other recommendations you would like to see made as part of this Inquiry to improve animal welfare in research?
- More independent members on Animal Ethics Committees. It is currently possible for an AEC to have an internal chair, deputy chair, scientific members, veterinarians and welfare members. This leaves only the LAY/Community member as external to the institution. For example, in some larger institutions they will have veterinarians who are employed at that institution as facility managers, clinical veterinarians, research team staff etc sitting on the AEC as Category C (Animal welfare) and Category A (Veterinary) members. Having an AEC that is primarily comprised of people employed by the institution assessing the research applications of their colleagues has the potential to compromise the robustness of the review process.
 - Ensuring that all research projects have sufficient funding to conduct adverse and unexpected event investigations.
 - Requiring AEC approval before research grants are approved. The current model of funding being approved PRIOR to AEC review can put pressure on an AEC to approve a funded project. The NHMRC requirement for AEC approval prior to release of funds does not address this problem.