

Environment Protection and Biodiversity Conservation Amendment (Prohibition of Live Imports of Primates for Research) Bill 2015

Humane Research Australia is a not for profit organisation that challenges the use of animal experiments and promotes more humane and scientifically valid methods of research that do not use animals.

The use of non-animal methods of research will not only eliminate the cruelty perpetuated on other species, but importantly, means that real cures for human disease are found expeditiously and brought to the market far more quickly than those which involve animal testing. (For examples of non-animal research, The Fund for the Replacement of Animals In Medical Experiments in the United Kingdom has examined non primate alternatives in five areas of medical research) ¹

The United States Food & Drug Administration data² has found that more than 90% of drugs successfully tested on animals fail when translated to humans. The logical conclusion is that the remaining small number of drugs tested on animals that actually work in humans work *in spite* of being tested on animals, not *because* of animal testing itself. It also raises the separate question of whether any possible human cures have been discounted because they did not work on animals.

HRA therefore welcomes this opportunity to comment on the above Inquiry.

Primates as models for human disease

Aside from the clear ethical dilemma of using animals with high cognitive abilities and well-developed social structures as tools for research, the use of primates has been found to be poorly predictive of human outcomes and their use has proven to be ineffective at providing substantial contributions to biomedical research. In his 2014 paper, "Monkey-based research on human disease: the implications of genetic differences", J. Bailey³ concludes that despite a reported 90 to 93% genetic similarity, "monkey data do not translate well to progress in clinical practice for humans."

¹ G. Buckland, N. Gordon, G. Langley, M. Hudson, and C. Brock, Replacing Primates in Medical Research, Dr Hadwen Trust / FRAME / St Andrew Animal Fund, October 2008.

² FDA Issues Advice to Make Earliest Stages Of Clinical Drug Development More Efficient. Press release / FDA 12jan2006

³ Altern Lab Anim. 2014 Nov;42(5):287-317.

Similarly, a peer reviewed article published in 2010⁴ clearly states, "Humans respond differently than other primates to a large number of infections. Differences in susceptibility to infectious agents between humans and other primates are probably due to inter-species differences in immune response to infection."

This has been recognised in the United States where, two years after retiring most of its research chimpanzees, the US National Institutes of Health announced in November 2015 that it is ceasing its chimp programme altogether with all animals being sent to the federally funded retirement sanctuary, Chimp Haven in Louisiana.⁵

Yet, instead of phasing out the use of primates, the Australian government continues to fund three primate breeding facilities - the National Marmoset and Macaque Facilities both located at Churchill, Victoria and the National Baboon Facility in Sydney, all of which breed animals specifically for the purpose of being used in research.

Australians oppose the use of primates in research

A 2013 Nexus Research Poll, commissioned by HRA, revealed 60% of the Australian population is opposed to the use of primates in research, with a further 17% undecided.⁶

In 2011, Labor MP Mike Symon presented a petition of over **10,000 signatures** to the House of Representatives calling for a ban on the importation of primates for research.⁷

<u>Importation of primates</u>

Since 2000, despite Australia's ready supply" (as previously mentioned), nine permits have been granted to import primates into this country for research purposes. Data obtained from CITES⁸ (Convention on the International Trade in Endangered Species - to which Australia is a signatory), shows that between 2000-2015, Australia has imported:

- 331 pig-tailed macaques (Macaca nemestrina) listed on the International Union for Conservation of Nature (ICUN) Red List of Threatened Species as vulnerable to extinction (from Indonesia)
- 250 crab-eating macaques (Macaca fascicularis) listed on the IUCN Red List from Indonesia
- 71 owl monkeys (Aotus lemurinus grisembra) listed on the IUCN Red List from the US.[15]
- 37 marmosets (Callithrix jacchus) from France.

Primates used in medical research are subjected to highly invasive procedures including brain and vision experiments, human immunodeficiency virus (HIV) studies and heart research.

2010. journals. plos. org/plosgenetics/article? id=10.1371/journal.pgen. 1001249

⁴ "Functional Comparison of Innate Immune Signaling Pathways in Primates" Barreiro,

⁵ http://www.nature.com/news/nih-to-retire-all-research-chimpanzees-1.18817

 $^{^6~\}text{http://www.humaneresearch.org.au/interview/australians-say-no-to-animal-experiments}$

⁷ http://www.openaustralia.org.au/debates/?id=2011-11-23.166.1

⁸ http://trade.cites.org/

The gruelling long distance travel that these animals must endure therefore adds insult to injury when considering their ultimate fate.

Captured from the Wild

The National Health & Medical Research Council's 'Policy on the care and use of non-human primates for scientific purposes' states "Non-human primates imported from overseas must not be taken from wild populations and must be accompanied by documentation to certify their status." (4) Similarly, Indonesia has an official ban on the export of wild-caught macaques. Ironically, there is no restriction on the number of monkeys who can be trapped in the wild to replenish breeding stocks. In April 2009, the British Union Against Vivisection (BUAV) published a report on its undercover investigation: *Indonesia: The trade in primates for research.* Not surprisingly, the report concluded that the ban on wild-caught macaques is a sham.

Bogor Agricultural University

The BUAV report also documents conditions at Bogor Agricultural University (IPB), Indonesia -where Australia's imports have been sourced from:

Extract from the BUAV report

"The BUAV investigators visited one holding facility at the IPB which they were told infant and juvenile long-tailed macaques who had been taken there after they had been trapped on Tinjil Island. The facility contained a number of small rooms, each containing one small chain link pen housing around 15-20 monkeys. The pens were a barren environment with a metal grid floor. There was no substrate for the monkeys to play or dig in. There was virtually no enrichment, just a few perches. The monkeys could only climb the side of the pens and there was nowhere for them to hide from each other or people. The pens were indoors so there was no fresh air and limited sunlight through one window. Only one pen was seen to have a water bottle attached to it. The others had free standing bowls made from either rubber or plastic. In at least one pen, this bowl was empty, leaving the monkeys no access to water. The only evidence of food was a few pieces of monkey chow seen on the wire floor of one pen. In other pens no food was visible.

The areas underneath the pens were covered in waste and what appeared to be monkey chow biscuits that had fallen through the grid floor. Mould could be seen growing on some of the food. This was a stressful environment in which these monkeys were forced to live. These conditions were in stark contrast to living freely in family groups in a natural environment on Tinjil Island." $(\underline{6})$

Added to this fear and misery are the holding pens at airports and long arduous flights to destination countries - all this before the research begins.

HRA has therefore formed the strong view that there is no justification for Australia to support this international trade in cruelty which also perpetuates bad science.

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Submission 1

HRA's view is that Australian researchers should be using non-animal methodologies that are far more relevant to studying human disease rather than trying to replicate a disease in a species that is genetically different to our own and expecting to achieve accurate or indicative results for humans.

HRA therefore fully supports the Environment Protection and Biodiversity Conservation Amendment (Prohibition of Live Imports of Primates for Research) Bill 2015.

Thank you again for the opportunity to comment on this Inquiry. Should you require any further information on any issue raised in this submission please do not hesitate to contact the undersigned. In addition we would be more than happy to meet to discuss this review and our response in further detail.

Yours sincerely,

Helen Marston
Chief Executive Officer