

17 October 2002

Project Officer – Animal Ethics  
Health Ethics Section  
NHMRC (MDP 100)  
GPO Box 9848  
CANBERRA ACT 2601

### **Submission on the Draft Policy on the Use of Non-Human Primates in Medical Research.**

On behalf of the Committee of Management and Members of The Humane Society of Western Australia (Inc), please find attached the Society's submission as an objection to the Use of Non-Human Primates in Medical Research.

Our submission is based on the following:

1. The close biological relationship that exists between non-human primates and human beings.
2. The development of alternatives to experiments on non-human primates.
3. The four statutory obligations of the NHMRC.

#### **Category 1 – Close Biological Relationship**

The NHMRC already recognise that non-human primates as “being closely related to humans” and further that “non-human primates have a well developed forebrain and special ethical and welfare issues arise because of their cognitive abilities.”<sup>1</sup>

As we understand it, the NHMRCs own position on the use of great apes in research is qualified as “Species of great ape are gorillas, orangutans and chimpanzees. Proposals to AECs requesting the use of great apes for research or teaching purposes deserve particular consideration. Great Apes may only be used if all the following criteria are met; the use in teaching or research would benefit the individual animal; the use in teaching or research would benefit the species to which the animal belongs; and the likely benefits outweigh the potential harm to the animal.”<sup>2</sup>

However, we believe that this type of reasoning must also applied to all the other species collectively grouped together as “non-human primates”. Applying rules to one species of non-human primate and not to all the others draws parallels to discrimination within the human race. It could be argued that one race is inferior to another therefore it is acceptable to subject them to medical research, albeit “humanely”. Alternately, people who suffer from mental disabilities could also be considered as experimental models because they may not be able to adequately communicate their wishes. Both arguments hint of terrible regimes that have come and gone and are, thankfully, considered repugnant in our modern society!

In a paper by Goodman, Morris it is pointed out “The other new paradigm rejects the

---

<sup>1</sup> National Health and Medical Research Council Animal Welfare Committee. Introduction to Policy on the use of Non-Human Primates in Medical Research, September 1997.

<sup>2</sup> National Health & Medical Research Council, Animal Welfare Committee Draft Policy on the Use of Non-Human Primates in Medical Research. *Page 2.*

traditional anthropological view that we humans are greatly different from all other animal species. Instead, the molecular view emphasizes how much we hold in common with other species, especially with our sister-group the common and bonobo chimpanzees.” And furthermore “...in terms of the DNA and paleontological evidence on primate phylogeny, a temporal based phylogenetic classification of primates that describes in an objective, nonanthropocentric way the taxonomic place of humankind among the primates.”<sup>3</sup> Clearly suggesting that the human race belong not above or below but amongst the classification of “primates” and there is no difference between “non-human” and “human” primates within the classification.

## Great Apes

Chimpanzees are the species of great ape chosen for medical research, due to their greater similarity to humans. Chimpanzees are hominoids along with human beings, bonobos, orang-utans and gorillas. Once again however, humans are hominoids that escape the ‘great ape’ label.

Chimpanzees are more closely related to humans than they are to gorillas and possess many qualities that were once considered solely human. “Humans and chimpanzees are more than 98.3% identical in their typical nuclear noncoding DNA and more than 99.5% identical in the active coding nucleotide sequences of their functional nuclear genes (Goodman et al., 1989, 1990).”<sup>4</sup>

Chimpanzees have been shown to possess self-consciousness, anticipate future events, count and speak in sign language, form deep bonds with humans and each other and to form separate cultures within Africa.

Van Lawick-Goodall suggests that the modern chimpanzee displays a type of intelligence closer to that of man than is found in any other present-day mammal “...the chimpanzee is, nevertheless a creature of immense significance to the understanding of man... He has the ability to solve quite complex problems, he can use and make tools for a variety of purposes...”<sup>5</sup>

The work of van Lawick-Goodall, Kortlandt and van Zon, and Wright shows “that present-day chimpanzees, orangutans and macaque monkeys are capable of using simple tools and bipedal locomotion”<sup>6</sup>. Wright concluded, after tool-using experiments with a captive orang-utan, “that manipulative disability is not a factor which would have prevented Australopithecines from mastering the fundamentals of tool technology”.<sup>7</sup>

Using items for uses other than that for which they were intended provides a thought pattern that is once again not limited to human beings. “Feeding devices and enrichment foods were responded to differently by young, single-caged rhesus macaques. Devices served multiple enrichment functions for socially-restricted monkeys: empty mats and puzzles became perches and toys, providing opportunities to express more components of the species-typical behavioural repertoire than did a

---

<sup>3</sup> An Objective Time Based Phylogenetic Classification of Primates that Places Chimpanzees and Humans in the Genus Homo (Goodman, Morris)

<sup>4</sup> An Objective Time Based Phylogenetic Classification of Primates that Places Chimpanzees and Humans in the Genus Homo (Goodman, Morris).

<sup>5</sup> Van Lawick-Goodall, J. (1971), *In the Shadow of Man*, Collins, London.

<sup>6</sup> Kortlandt, A. & van Zon, J. C. J. (1968), 'The present state of research on the dehumanization hypothesis of African ape evolution'. *Proc. 2nd Int. Cong. Primatol.*, Atlanta, pp. 10-13.

<sup>7</sup> Wright, R.V. S. (1972), 'Imitative learning of a flaked-stone technology', *Mankind* 8, pp. 296-306.

piece of banana or a block of frozen juice.”<sup>8</sup>

### **Banning the Use of Great Apes in Invasive/Medical Research**

World consensus is growing that great apes cannot and should not be used in animal experiments, for ethical reasons. The United Kingdom led the way in 1997 by prohibiting their use in research with the Home Office announcing:

“A ban on the use of Great Apes “Great Apes... have never been used under the 1986 Act [the current legislation] as laboratory animals... The Government will not allow their use in future. This is a matter of morality. The cognitive and behavioural characteristics and qualities of these animals mean it is unethical to treat them as expendable for research.”

New Zealand followed, in 1999, banning the use of great apes for research unless the testing is in the best interest of the animal or its own species.

On 20th December 2000, the US Government introduced the Chimpanzee Health Improvement, Maintenance, and Protection (CHIMP) Act, affirming the US Government's responsibility for, and moral obligation to, ex-laboratory chimpanzees. The US government is now commencing with a network of federally funded sanctuaries providing for their long-term care and well being and a chimpanzee-breeding moratorium has also been implemented at primate research centres.

However, cognitive responses in non-human primates are not limited just to chimpanzees, what we may consider as normal and routine can cause distress in other non-human primates signifying that they are extremely aware of events or activities.

“Some of the normal daily human activities associated with keeping primates are likely to be stressful to the animals. Collection of blood samples generally requires physical restraint and the transient pain of venipuncture, and may be otherwise aversive. The disorientation and loss of control caused by anaesthesia may itself lead to fear and distress.”<sup>9</sup>

Emotional bonds and attachments formed between non-human primates and other species are well documented signifying that the display of emotions is not just reserved for human beings. Bonding is even pointed out in your own documentation. “Social interaction is paramount for well-being. Social deprivation in all its forms must be avoided.”<sup>10</sup>

“Rhesus have formed strong and specific attachments to their canine companions (Mason & Kenney, 1974). Although the infant in this study appeared to show some interest in the dog throughout testing, contact with the dog was more frequent near the end of the study. This may be indicative of the bond formation process as well as the infant's development.”<sup>11</sup>

---

<sup>8</sup> The Effects Of Different Types Of Feeding Enhancements On The Behaviour Of Single Caged, Yearling Rhesus Macaques. S J Schapiro, S A Suarez, L M Porter and M A Bloomsmith Department of Veterinary Sciences, University of Texas MD Anderson Cancer Center Science Park, Bastrop, Texas 78602 USA.

<sup>9</sup> Heart Rate and Activity of Rhesus Monkeys in Response to Routine Events. Scott W. Line, Kathleen N. Morgan, Hal Markowitz, and Sharon Strong. California Primate Research Center and San Francisco State University.

<sup>10</sup> Introduction to NHMRC Policy on the use of Non-Human Primates in Medical Research.

<sup>11</sup> Laboratory Primate Newsletter Volume 30 Number 2 April 1991 Copyright @1991 by Brown University.

Acts of kindness is another emotion not solely restricted to human beings; “Binti Juna, A female lowland gorilla was the center of media attention in August of 1996. She had obtained “Hero” of the year after her rescue and gentle treatment of an injured child who had fallen into her zoo exhibit. People were astonished at the video footage of the gorilla cradling the unconscious little boy and then carrying him to a door where zoo keepers could reach him. This wasn’t the first time a gorilla did such a thing, for several years ago, a seven foot tall male (a silverback) named Jambo, received media attention when a young boy had fallen into his exhibit, and he too astonished people with his gentle caressing of the unconscious child.”<sup>12</sup>

Captive breeding and confinement on the other hand has negative effect causing social disorders and self-mutilation and boredom. “It was concluded that hair-pulling-and-eating is an aggressive behavioural disorder in captive rhesus monkeys, reflecting psychogenic adjustment problems in an unnatural environment. (Supported by NIH Grant RR-00167).”<sup>13</sup> Once again this negative aspect can be easily extrapolated to human beings where inmates of penal institutions display anti social behaviour.

### **Category 2 - Alternative Methods**

Across the world there is growing opposition to the confinement of primates for medical research, particularly Great Apes. As discussed in this submission, primatologists have discovered that non-human primates are able to anticipate future events and chimpanzees can learn sophisticated patterns of sign language.

The United Kingdom and New Zealand have already banned the use of Great Apes in experiments. The Netherlands also “...voted unanimously in April to hand over the EU’s last known remaining chimpanzees to an animal sanctuary....”<sup>14</sup>.

With new technologies of DNA comes the knowledge that other species share similar genes and DNA coding as human beings.

We oppose the use of non-human primates in medical research and request that the NHMRC instigate the adoption of alternative methods. Furthermore, we strongly recommend that when issuing medical research grants the NHMRC request that grant recipients demonstrate how they are developing alternatives to the use of animals in research for the future.

### **Category 3 – NHMRC Obligations**

The NHMRC have defined their obligations as follows:

“To raise the standard of individual and public health throughout Australia; to foster the development of consistent health standards between the various States and Territories; to foster medical research and training and public health research and training throughout Australia; and to foster consideration of ethical issues relating to health.”<sup>15</sup>.

Given there is so much evidence available that non-human primates have feelings that are comparative to our own it is immoral and certainly unethical that they are used in medical research. It is apparent that it is the threat of “legal” action that causes most

---

<sup>12</sup> The Gorilla Foundation. Box 620-530 Woodside, CA 942062

<sup>13</sup> Partner Directed Hair-Pulling-And-Eating In (Macaca Mulatta). Wisconsin Regional Primate Research Center, Madison, Wisconsin.

<sup>14</sup> Chimps to be freed from lab hell. Animals International August 2002 No.65 WSPA.

<sup>15</sup> NHMRC Website: <http://www.health.gov.au/nhmrc/aboutus/index.htm>

researchers to cite as a defence the use of animal experiments in their research. Clinical trials, “A scientific test of the effectiveness and safety of a therapeutic agent (as a drug or vaccine) using consenting human subjects”<sup>16</sup> use just that ‘consenting human subjects’. All drugs or therapies at some stage will be clinically trialled for success (or otherwise), side effects and long term outcomes, certainly something that animals cannot communicate.

It also appears that the NHMRC are content to keep the status quo in using non-human primates in medical research and providing research grants without some form of induce the researchers to demonstrate they are in the process of developing alternative methods to the eventual replacement of the animal model in their test processes. It is foolish to expect that researchers would consider this without some form of controlling enforcement agency such as the NHMRC, which is provided for in the obligations that the NHMRC have defined.

The question whether the use of non-human primates in experiments is moral or ethical? I can answer categorically on behalf of this Society that it is neither.

Yours faithfully

Lindsey Linfoot (Mrs)  
President

---

<sup>16</sup> Merriam-Webster's Medical Dictionary, Network Edition 1997.

## **APPENDIX A**

### **Quotations:**

*"The attitude of those who believe that any use of non-human primates can be justified provided it results in some benefit, or expected benefit, to humankind, is of precisely the same mind set as that which once allowed us to exploit human beings of another race and use them as slaves. Once we admit that chimpanzees have minds and feelings, are capable of sadness, fear and despair, are able to feel pain, show altruism, and are capable of communicating with each other and with humans in a man-made language, we have to ask serious questions, initially of ourselves, as to whether we should continue to use them in medical research. I feel strongly that the use of beings so like us, as a human guinea-pig, is morally unjustified."*

**-- Dr Jane Goodall**

*"It is impossible to provide laboratory conditions which meet the physical and behavioural needs of chimpanzees".*

**-- Prof. Michael Balls: Director of the EU-funded ECVAM, the European Centre for the Validation of Alternative Methods**

*"Nevertheless, the difference in mind between man and the higher animals, great as it is, is one of degree and not of kind."*

**-- Charles Darwin (1809–1882), British naturalist. Descent of Man (1871)**

*"I had bought two male chimps from a primate colony in Holland. They lived next to each other in separate cages for several months before I used one as a [heart] donor. When we put him to sleep in his cage in preparation for the operation, he chattered and cried incessantly. We attached no significance to this, but it must have made a great impression on his companion, for when we removed the body to the operating room, the other chimp wept bitterly and was inconsolable for days. The incident made a deep impression on me. I vowed never again to experiment with such sensitive creatures."*

**-- Christian Barnard. (1922-) (Heart Surgeon)**

*Once I saw a chimpanzee gaze at a particularly beautiful sunset for a full 15 minutes, watching the changing colors [and then] retire to the forest without picking a pawpaw for supper.*

**-- Adriaan Kortlandt: "Chimpanzees in the Wild" Scientific American May 62**

*I abhor vivisection. It should at least be curbed. Better, it should be abolished. I know of no achievement through vivisection, no scientific discovery, that could not have been obtained without such barbarism and cruelty. The whole thing is evil.*

**-- Charles Mayo, founder of the Mayo Clinic**

*During my medical education at the University of Basel I found vivisection horrible, barbarous, and above all unnecessary.*

**-- Carl G. Jung (psychologist)**

*"All species, all varieties of animals and even individuals of the same species differ from one another. No experimentation carried out on one species can be extrapolated to any other. The belief that such extrapolation could be legitimate is the main reason for the failures, and sometimes for the catastrophes, that modern medicine inflicts on us, especially where drugs are concerned."*

**-- Professor Pietro Croce, Honorary President of Doctors and Lawyers for Responsible Medicine.**

*Ask the experimenters why they experiment on animals, and the answer is: "Because the animals are like us." Ask the experimenters why it is morally OK to experiment on animals, and the answer is: "Because the animals are not like us." Animal experimentation rests on a logical contradiction.*

**-- Professor Charles R. Magel (1920- )**

*Results from animal tests are not transferable between species, and therefore cannot guarantee product safety for humans...In reality these tests do not provide protection for consumers from unsafe products, but rather they are used to protect corporations from legal liability.*

**--Herbert Gundersheimer, M.D., member, PCRM (Physicians Committee for Responsible Medicine), Baltimore, Maryland, 1988**

## **APPENDIX B**

### **A DECLARATION ON GREAT APES**

We demand the extension of the community of equals to include all great apes: human beings, chimpanzees, gorillas and orang-utans.

The "community of equals" is the moral community within which we accept certain basic moral principles or rights as governing our relations with each other and enforceable at law. Among these principles or rights are the following:

#### **1. The Right to Life**

The lives of members of the community of equals are to be protected. Members of the community of equals may not be killed except in very strictly defined circumstances, for example, self-defence.

#### **2. The Protection of Individual Liberty**

Members of the community of equals are not to be arbitrarily deprived of their liberty; if they should be imprisoned without due legal process, they have the right to immediate release. The detention of those who have not been convicted of any crime, or of those who are not criminally liable, should be allowed only where it can be shown to be for their own good, or necessary to protect the public from a member of the community who would clearly be a danger to others if at liberty. In such cases, members of the community of equals must have the right to appeal, either directly or, if they lack the relevant capacity, through an advocate, to a judicial tribunal.

#### **3. The Prohibition of Torture**

The deliberate infliction of severe pain on a member of the community of equals, either wantonly or for an alleged benefit to others, is regarded as torture, and is wrong.<sup>17</sup>

---

<sup>17</sup>A Declaration on Great Apes. The Great Ape Project.