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Moving the Primate Debate Forward

IN THE UNITED KINGDOM, PUBLIC CONCERN ABOUT THE USE OF ANIMALS FOR research has a long and checkered history. In 1875, Charles Dodgson, better known by his pseudonym Lewis Carroll as the author of *Alice's Adventures in Wonderland*, wrote a fierce polemic on vivisection in an attempt to prevent the establishment of a physiology department at Oxford University. The activities of animal rights movements have since reached new dimensions, ranging from threatening mail and personal violence to letter bombs and worse. Nevertheless, opinion polls show that the majority of the UK public accepts the need to use animals for medical research. What they are less happy about is the use of primates, particularly for what is perceived as curiosity-driven research rather than work with a medical objective. The debate on this topic is likely to remain highly controversial in the United Kingdom, but a recent report* by an independent group of scientists and nonscientists outside the primate research community attempts to provide a better-informed basis for this debate through an in-depth analysis of the scientific reasons for research on monkeys. Most important, it calls for a national strategic plan for nonhuman primate research. The sponsors of the report—the Royal Society, Medical Research Council, Wellcome Trust, and Academy of Medical Sciences—are expected to respond to the report's recommendations by June 2007.

Because no great apes have been used for research in the United Kingdom since 1986, the report deals mainly with the use of monkeys in basic or applied research, making the case that modern biomedical research encompasses a continuum between them. It focuses on the neurosciences and on communicable diseases, particularly the development of vaccines for HIV/AIDS, tuberculosis, and malaria. For each case, global health importance and approaches that could be taken to avoid the use of animals are examined in detail. Other research areas are considered briefly, as well as ethics, animal welfare, drug discovery, and toxicology. The current status of alternatives to animal use is also reviewed, ranging from molecular, cellular, and noninvasive approaches for studying the nervous system, to stem cell biology and pharmaco-metabonomic phenotyping.

The report concludes that in some cases there is a valid scientific argument for the continued use of monkeys. Although the amount of biomedical research done in the United Kingdom has almost doubled over the past 10 years, the number of monkeys used has remained relatively constant, indicating that alternative research venues are being pursued. However, because of the speed of development in the biomedical sciences and the increasing availability of alternatives to animal use, no blanket decisions can be made. Rather, each case must be considered individually, supported by a fully informed assessment of the importance of the work and of approaches that do not require animals. To this end, the national strategic plan for primate research called for by the report includes the regular dissemination of information about alternative methods and the creation of centers of excellence, both for the better care of animals and for the training of scientists. The plan also emphasizes openness by journals in disclosing the suffering caused to animals and calls for regular publication of the outcomes of primate research and toxicology studies by funding bodies and the pharmaceutical industry.

Over recent years, the UK government has taken steps to protect scientists and others who are involved in animal research. We hope that it will now join forces with the sponsors of this report to activate its recommendations. The public debate on nonhuman primate research needs to move forward on the basis of sound scientific reasons. The increasing study of biology and disease at the cellular and molecular levels, supported by small-animal models, will probably reduce the requirement for primates in research. However, we do not currently know the most effective approach in some vital areas. Thus, it would be extremely unwise to rule out primate use for the foreseeable future.

— David Weatherall and Helen Munn

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**The Use of Non-Human Primates in Research* (www.acmedsci.ac.uk/images/project/nhpdownl.pdf).



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