

# SCIENTIFIC UPDATE

Andrew Knight reports on animal experiments

**V**irtually every medical achievement of the last century has depended directly or indirectly on research with animals, according to over 500 eminent academics who signed a public petition in 2005, and according to governmental and non-governmental organisations such as the US Public Health Service, the Royal Society, and the UK Department of Health. It was therefore refreshing to see Dr Robert Matthews of Aston University, Birmingham, utterly demolish this claim, via an analysis of the poor human predictivity of animal models, in a recent edition of the *Journal of the Royal Society of Medicine*. Dr Matthews concluded that:

“The eminence of many of those who have repeated this claim ... places an obligation upon them to be able to substantiate it. The failure – and, in all likelihood, inability – to do so exposes some of our most respected academic institutions to a charge of abuse of authority.”

## THE FALLACY

Dr Matthews’ article is the latest in a series of scientific studies by Animal Consultants International and our scientific colleagues based primarily within Europe and the US, that has exposed the fallacy of relying on animal models to answer questions about human beings. In 2007 I published two key studies in this series, conclusively establishing that:

\* Animal experiments are not generally useful in contributing toward advancements

in human healthcare, or predictions of human toxicity; and,

\* Despite most closely modelling human beings, chimpanzee experiments have contributed minimally toward the development of cures for human diseases.

These combined results from thousands of animal experiments prove they rarely – if ever – contribute toward advances in human healthcare. Furthermore, they do not reliably predict human toxicity. Continuing to rely on animal models in denial of scientific evidence of such strength risks human lives.

## CHIMP EXPERIMENTS

Experiments on chimpanzees are particularly controversial. Their advanced sensory, psychological and social characteristics confer upon them a profound ability to suffer when born into unnatural captive environments, or captured from the wild – as many older research chimpanzees once were – and when subsequently subjected to confinement, social disruption, and involuntary participation in potentially harmful biomedical research. Significant public concern has already led to legislative or policy bans on great ape experimentation in seven European countries (including the UK), and New Zealand, and the US is now almost completely isolated internationally, in continuing chimpanzee experimentation.

None of the chimpanzee experiments examined within my statistically-significant random sample made an essential contribution, or, in most cases, a significant contribution of any kind, toward the development of human medical

techniques. The approval of large numbers of experiments of such dubious scientific merit therefore demonstrates a widespread failure of the ethics committee system. The ethics committees responsible failed in their duty to society, and to the animals they were charged with protecting. Chimpanzee experiments should clearly be banned in those very few remaining countries – notably the US – that persist in conducting them.

## VITAL EVIDENCE

Because these studies examine large numbers of animal experiments, selected systematically using randomization or similar means, and because they are conducted to a standard sufficient to achieve publication in peer-reviewed scientific journals, they provide a particularly high standard of evidence. They clearly establish that animal experiments contribute little toward human healthcare advances, or reliable predictions of human toxicity. This evidence should be considered by legislators, such as those currently revising *Directive 86/609/EEC on the Protection of Animals used for Experimental and other Scientific Purposes*, which regulates European laboratory animal use, and which presently allows experiments on non-human primates. All of these studies, as well as reviews of non-animal alternatives and animal use statistics, are

freely available from: [www. AnimalExperiments.info](http://www.AnimalExperiments.info). See also: [www. AnimalConsultants.org](http://www.AnimalConsultants.org) ■

