UK panel urges animal researchers to go public

Years of sometimes violent protests have left many British biomedical researchers afraid to talk about research involving animals. So it is with some trepidation that scientists face a call from the Nuffield Council on Bioethics to be open about what happens to animals in their labs.

Abusive letters and e-mails are regularly sent to the UK scientists who speak out in favour of animal research. In extreme cases, researchers have been physically attacked or had bombs sent to their homes. As a result, only a tiny fraction of Britain's thousands of biomedical scientists are willing to participate in discussions on animal research in the national media. "There are about 25 in the country," estimates Simon Festing, director of the RDS, a lobby group in London that supports animal research.

One consequence is public confusion about whether animal research is worthwhile, says Nuffield, the London-based think-tank, in a report published this week. And the solution, according to the report, is for researchers to get more involved in debates on the subject. It also wants the government to publish more details about the procedures used in animal experiments. About 3 million animals are used in scientific research each year in Britain, of which 80% are mice and rats.

"Openness will lead to better dialogue," says Steve Brown, an author of the report and director of the Medical Research Council's Mammalian Genetics Unit in Harwell near Oxford.

That principle is backed by critics and advocates of animal research - both sides claim **IMAGE UNAVAILABLE** FOR COPYRIGHT REASONS

What are you looking at? Scientists are being advised to give details of their animal experiments.

that the more the public knows, the more it will support their arguments (see 'Straight talking').

"It will operate in our favour," says Alistair Currie, campaigns director of the British Union for the Abolition of Vivisection, also based in London. The union, one of four animal-welfare groups represented on the report's 18-member panel, says few people realize how much basic research involves the use of animals. It claims the public will be more likely to oppose research if such information is available.

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"The antivivisectionists will run highly emotive campaigns, but they do that anyway," counters Festing. "I have faith in the process of democracy. People can see that there is a clear link between the animals' suffering and medical advances" medical advances."

However, researchers fear that releasing any extra information about their work could make them more vulnerable to attack.

A recent government decision to place online a summary of every licence issued for animal studies was praised by the Nuffield report. And the council wants the anonymous summaries, which started going up last December, to include information supplied after the experiments about, for example, the level of suffering caused and whether scientific objectives were met. But scientists fear that such details increase the risk to individual researchers.

"If you get down to the specifics of methodologies, you can pinpoint the people involved," says one senior neuroscientist, who asked not to be named.

Festing backs the summaries, but says that another way to spread information is to provide safe places for researchers to discuss their work. He suggests that universities could hold internal debates between faculties, to give researchers the confidence to speak openly.

Government commitment to protecting scientists is crucial, Festing adds. Legislation aimed at restricting activists' protests came into force on 7 April. "We need proper policing and enforcement of that law," he says. "If that goes ahead it will boost confidence." Jim Giles

STRAIGHT TALKING

The procedures detailed here, taken from research papers and animal-study licences, include the type of information that scientists are being asked to discuss with the public. But will such details make people more supportive of animal research, or less?

Animals used: Mice, rats, guineapigs, rabbits and dogs

Why? To find the doses of new drugs that are suitable for testing in humans.

What happens? The animals are given increasing doses of test drugs over a 24-hour period, by mouth, injection or a tube inserted in a blood vessel. During this time, the animals are restrained. To reduce the number of animals used, up to ten drugs may be given to each animal. Regular samples of blood are taken and bile may be tapped under general anaesthetic. The animals are killed if they show any discomfort, or at the end of the experiment.

EXPERIMENT 2

Animals used: Rhesus monkeys Why? To assess whether the brain chemical GDNF can prevent the death of dopamine-producing brain cells in monkeys that have been given a condition that is

similar to Parkinson's disease. What happens? MPTP, a chemical that induces a Parkinson's-like state, is injected into the monkeys' arteries. In animals that develop full symptoms, GDNF or a control is injected into their brain, with the needle held in place for three minutes. After a week the monkeys undergo regular hand-reaching tasks for three months. They are then anaesthetized, given a positron emission tomography scan, and killed.

EXPERIMENT 3

Animals used: Mice Why? To test whether genetically modified immune-system cells can treat cancer.

What happens? Cancer cells are injected under the skin of mice to trigger a tumour. Genetically modified immune cells are injected into the tail, and tumour growth is measured using callipers. The mice are killed if the tumour grows big enough 'to cause discomfort', or at the end of the experiment.