# No alternative in sight for animals in research

- Benefits said to outweigh social cost
- No unanimous conclusion by committee

#### Washington

THE National Research Council (NRC) this week has taken its turn at trying to resolve the difficult issues surrounding the use of animals in research. After three years of hearings and discussions on the question, a special committee appointed by the Commission of Life Sciences concluded, although not unanimously, that the "appropriate and humane use" of animals in research should continue.

The NRC report\* cost \$300,000 to produce, and as data are not yet available from the Institute of Laboratory Animal Resources, relies on previous studies by the Department of Agriculture and the Office of Technology Assessment to reach the conclusion that between 17 and 22 million animals are used annually in research. Of these, an estimated 85 per cent are rats and mice, with cats, dogs and non-human primates at less than two per cent of the total.

Alternatives to the use of animals should be considered by scientists, according to the NRC report, and federal agencies should move rapidly to adopt such tests once available. But the report concludes that "the chance that alternatives will completely replace animals in the foreseeable future is nil".

On the question of regulations for the proper care of animals, the NRC committee concluded that existing regulations were adequate if properly enforced. But this issue proved a divisive one. Christine Stevens, president of the Animal Welfare Institute and a member of the NRC committee, refused to sign the report, and added a statement published as an appendix to the report which argues that the committee had failed to face "the widespread, ingrained problem of unnecessary suffering among millions of laboratory animals".

A second appended statement, written by Arthur Guyton of the University of Mississippi School of Medicine, sets out an opposite viewpoint, criticizing the NRC committee for failing to take a stronger stand against repressive regulations foisted on the research community by the animal rights movement.

Norman Hackerman, a physical chemist who has served as president of both the University of Texas and of Rice University, chaired the NRC committee. He says that he and others on the committee who had no need of animals in their research—and therefore no personal bias in the sub-

ject — nonetheless were persuaded that the benefits derived from animal research outweighed the social cost.

The NRC report concluded that pound animals should be made available for research purposes. But Congress may be ready to set its own agenda on this issue. The Senate has passed and sent to the House of Representatives the Pet Theft Act, which would apply restrictions to the use of 'random source' dogs and cats. The act restricts the sale to researchers of dogs and cats obtained from public or private pounds, research facilities or from individuals who have bred and raised animals on their own property. This is aimed at stopping animal auctions and other quick sales that might encourage pet thefts. The act would also require pounds to hold animals for at least seven days before selling them, a restriction that would be prohibitively expensive for pounds according to opponents of the bill.

The House agriculture subcommittee on research is scheduled to hold hearings on the bill this week.

Joseph Palca

\*Use of Laboratory Animals in Biomedical and Behavioral Research. National Academy Press, Washington, DC, 1988.

■ Animal rights groups are waging a local fight to block the sale of stray animals by Los Angeles County pounds. A law suit against the county, filed by the New York-based Fund for Animals and Los Angeles-based Actors and Others for Animals in September 1986, was argued in court last week. Los Angeles county pounds currently sell animals under a county ordinance permitting the use of strays for "humanely conducted" research. The groups asked the court to prohibit such sales, charging that the county does not adequately ensure that the research conducted on pound animals is humane.

George Baca, deputy director of the county animal control department, defended the sale of strays, claiming that safeguards in the system prevent lost pets from getting "caught up in the mill." Every animal that comes into a county pound is held for seven days in case it is claimed by its owner, and then is offered up for adoption as a pet before it is offered for research. Baca said public pressure against the sale of pound animals has decreased the demand for animals in recent years. Of 85,000 animals that came into Los Angeles county shelters in the past year, only 700 were sold for research.

Marcia Barinaga

#### More cash for NIH

PRESIDENT Ronald Reagan last week signed the National Institutes of Health appropriations bill, providing \$7,200 million for the NIH in the 1989 fiscal year, compared with \$6,300 million in the current fiscal year.

\$606 million of the NIH appropriation is included in total of \$1,224 million appropriated to the Public Health Service specifically for dealing with the AIDS problem. The Centers for Disease Control gets \$382 million, with the rest spread among the Alcohol, Drug Abuse and Mental Health Administration (\$175.5 million), the Health Resources and Services Administration (\$45.5 million) and the office of the Assistant Secretary for Health (\$13.4 million).

## Acid questions

ACID rain is causing soils in Britain to become increasingly acidic, but there is no proof that it is responsible for forest decline.

That is one of the main conclusions of the first report on the UK Terrestrial Effects Review Group, established by the Department of the Environment in 1984, on the effect of acid rain on the terrestrial environment, which was published last week. Changes in soil biology may result from increasing soil acidity, and this is likely to alter plant nutrition and to change the chemistry and biology of freshwaters. The report concludes that this should be a high priority area for research in Britain.

C.McG.

### Gold for Nozières

THE Centre National de la Recherche Scientifique (CNRS), France's major state research organization, has awarded its 1988 Gold Medal to Philippe Nozières. Nozières, aged 56, holds the chair of statistical physics at the Collège de France. He was awarded the CNRS Silver Medal in 1962 and was the first French physicist to receive the Wolf Prize. He is most celebrated for his contributions to the physics of metals, semiconductors and magnetism.

#### Mysterious beauty

Benoit Mandelbrot, pioneer of fractal geometry, has been awarded the 1988 Louis Vuitton-Moët-Hennessy 'Science for Art' prize, worth FF100,000 (\$16,000). This is the first year that LVMH have offered a Science for Art prize, for important contributions to 'aesthetics research'. According to LVMH, "the mysterious beauty of fractal images is witness to the intimate relation between art and science".

Mandelbrot was born in Warsaw and educated at the Ecole Polytechnic in Paris. In 1958 he joined the IBM Research Center in the USA, where he is now an IBM fellow.