



INSTITUTION OF MANUSCRIPT PROCESSING FEE

A processing fee of \$50 must be submitted with each manuscript. The fee must be paid in United States currency by check or money order, payable to the journal, and drawn on or payable by a United States bank. Manuscripts will not be considered for publication until this fee is received. The fee also is required if a previously rejected manuscript is resubmitted.

Endocrinology: Commitment to Single Submission and Assignment of Copyright

Mail this form with the manuscript to:

Dr. P. Michael Conn
Bowen Science Building (2-369)
University of Iowa College of Medicine
Iowa City, IA 52242-1109

Manuscript No. _____
(If known)

Date: _____

I (we) hereby affirm that this manuscript entitled _____

is original. It has not been published and is not being submitted for publication elsewhere.

I (we), in consideration of the acceptance of the above work for publication, do hereby assign and transfer to The Endocrine Society all of the rights and interest in and to the copyright of my (our) above titled work. I (we) warrant that this work has not been previously copyrighted and that I (we) have the right to transfer copyright.

All authors must sign

Date _____	Name (print) _____	Signature _____
Date _____	Name (print) _____	Signature _____
Date _____	Name (print) _____	Signature _____
Date _____	Name (print) _____	Signature _____
Date _____	Name (print) _____	Signature _____
Date _____	Name (print) _____	Signature _____
Date _____	Name (print) _____	Signature _____
Date _____	Name (print) _____	Signature _____

Copies of this document may be submitted independently by various authors if, for example, they are currently located at different institutions. If the above manuscript is not accepted for publication, this copyright transfer has no legal effect and will be returned on request.

Editorial: Animal Rights and the Inertia of the Scientific Community

During recent years, activists have become increasingly aggressive in their attempts to stop the use of animals in biomedical research. Reflecting this trend, the influence that moderate animal welfare supporters once had on the animal rights movements has become negligible.

As we all know, animal rights activists claim that research with animals is morally wrong and should be terminated regardless of the potential benefits it may produce. They also contend that research with animals is irrelevant, represents bad science and, therefore, contributes little, if anything, to the well being of mankind (1-3).

In pursuing these arguments, animal rights organizations are employing a variety of methods ranging from political lobbying at both the local and national levels to blatant terrorism, including intimidation of scientists, attacks on laboratories, burning of research facilities, release of valuable animals, and stealing of data records. As pointed out in a recent review of the matter (4), violence has not only become a standard feature of the animal rights movement, but has even been publicly supported by some activists. There is little doubt, however, that terrorist activities will only lead to public opinion turning against a movement that, unable to exercise reasoning (after all, the ability to reason is what differentiates us from animals), resorts to violence.

On other fronts, animal rights organizations are devoting intense efforts to: 1) obtain financial support for their cause, and 2) lobby legislators to impose new and costly state and local government regulations to biomedical research. Not surprisingly, this persistent, relentless effort has already begun to pay off. Current estimates indicate the existence of at least 400 protectionist groups world-wide. In the United States alone, a budget of more than \$50 million is considered to be available to animals rights and animal welfare organizations (5). The intense political pressure these groups are exerting on both elected and appointed government officials has resulted

in the introduction of numerous bills in state legislatures (5) in 1987 alone, see Ref. 6) to curtail the use of animals in research. Attempts are also being made to block the construction and operation of laboratory facilities on the (almost contemptuous) grounds that they may be harmful to the environment (7). More worrisome, there has been actual enactment of state, federal, and local regulations that severely cripple our ability to conduct biomedical research. Remarkable examples of this political success is provided by the enactments of laws in both Massachusetts and New York prohibiting the use of pound animals for research, while millions of these animals go unclaimed and must be killed, and by the even more far-reaching decision of the Superior Court of Suffolk County which recently ordered the University of Massachusetts to open its IACUC (Institutional Animal Care and Use Committee) meetings to the public (8). There is little doubt that this decision will make the objective assessment of experimental protocols involving animals an almost impossible task.

A matter of grave concern to all of us in the United States is the recent set of rules regulating research with animals imposed by the U.S. Department of Agriculture (USDA), and which will implement the amended Animal Welfare Act of 1985. Parts I and II became law on August 31, 1989. Part III, dealing with the psychological well being of dogs and nonhuman primates, was published for comment earlier in the year. Implementation of the new standards will impose a direct cost burden of more than \$1 billion to research institutions. Moreover, as pointed out by the National Association for Biomedical Research (9) the proposed standards are not scientifically justified and do not provide any evidence that they will actually improve the care and treatment of laboratory animals.

An example of the nature of some of the proposed regulations is the requirement that individually housed primates have "positive physical contact" with their keeper for at least 1 h/day. Positive physical contact is defined as petting, stroking, or other touching. The feasibility of implementing such a rule is almost nil. For instance, if a Primate Research Center has 200 monkeys housed individually, it would take 25 keepers to provide 1 h a day of positive physical contact! Of greater concern are the dangers associated with such contact, in the last

Received September 1, 1989.
Serge Orlie, D.V.M., the author of this editorial, is Head of the Division of Neuroscience at the Oregon Regional Primate Research Center in Beaverton, Oregon and previously an Editor of Endocrinology. Individuals who wish to write an editorial should contact the Editor-in-Chief.

2 yr, three people died after being infected with simian Herpes B virus.

It would be, I believe, extremely difficult to find a scientist who is not concerned about the humane treatment of animals, and who does not strongly advocate procedures that upgrade the care and treatment of laboratory animals. I also find it hard to believe that there are some among us who would deliberately abuse animals. However, animal rights activists, through their media campaign, have managed to mislead the general public (and some of our legislators) into believing that inflicted animal pain and abuse of animals is common practice in biomedical research (see also Ref. 7).

The rhetoric used by animal rights leaders is intense and convincing to the casual observer. For instance, the often quoted aphorism made by a codirector of PETA (People for the Ethical Treatment of Animals), "A rat is a pig is a boy is a dog" (3), has an almost compelling meaning, until one realizes that no one mentally sane would accept the view that the life or death of a boy has the same significance as that of a pig.

One of the founders of modern animal rights philosophy, Richard Ryder, introduced (1) the concept of speciesism which he equated with fascism. What is forgotten when this concept is invoked and expounded upon is that Nazi Germany is the only modern state that has ever prohibited animal experimentation. As stated by the Nazi party press in 1933 "...The New Germany... gives rights to the tortured, tormented and, up until now, completely unprotected animals... What Reich Chancellor Adolf Hitler and Prime Minister Goring did and will do for the protection of animals, stands as a guideline to the leaders of all civilized states" (10, quoted in Ref. 4). History has established that the subsequent activities of the Nazi regimen were entirely consistent with the principle that animals cannot be used as surrogates for human beings, and that humans instead can serve as the subjects of experimentation.

Perhaps the aforementioned considerations do little more than to expose the fallacy of some arguments used by modern animal rights activists. They point, however, to the real danger faced by biomedical research throughout the world: the gradual tightening of laws and regulations concerning use of animals in research to such an extent that performing any investigation which involves animals may be virtually impossible, or at best, drain large quantities of tax funds for extensive regulatory monitoring.

Why has the animal rights movement grown so strong in circumstances where the vast majority of Americans (77%) believe that the use of animals in research is necessary for medical progress (11)? The biomedical community itself should bear a significant portion of the blame. Perhaps, we have not been involved because we

have felt that others more qualified would take care of the issue. Or perhaps because we have (wrongly) concluded that the issue may not be terribly important, and that if we do not think about it maybe it will go away. This is clearly not the case. I would strongly endorse the view put forward by Larry Horton in a recent commentary (4) that "The issue must be truly recognized by scientists as serious enough to warrant their personal involvement on a priority basis."

We need to close ranks behind these organizations which are already speaking in favor of biomedical research with animals, and commit ourselves to reversing the current trend towards banning the use of animals in research. The American Medical Association (AMA) and The Society for Neuroscience have taken leadership roles in defending and strengthening the research activities of the biomedical community. Other groups involved are The American Heart Association and networks such as The Coalition for Animals and Animal Research (CFAAR), formed by college faculty and students, and the California Biomedical Research Association, a gathering of universities and voluntary health organizations.

I would encourage The Endocrine Society to follow suit, and its members to become fully aware of the issue by reading the AMA White Paper on Use of Animals in Biomedical Research, and the letter sent by Dr. David H. Hubel, President of The Society for Neuroscience, to its constituency on May 10, 1989. It is very important that we let our congressional representatives know our views. This can be done on an individual basis, as a group, or with an even greater strength, as institutions. We should encourage the administrative branch of universities and research institutions to take a more active role and organize efforts to lobby the local, state, and federal legislatures.

We must also increase public information (12). Many of us have children in school, brief presentations in their classroom describing the benefits of biomedical research can be arranged as part of their learning process. These presentations are an opportunity to provide the students with an appreciation of the scientific method and the fact that there is a line, circuitous but essential, between basic research and future improvements of human and animal health.

In general, scientists do not feel comfortable speaking to the general public. However, participation in television programs in which the subject is discussed has an enormous potential benefit. We should encourage our institutions to take an active role in asking tv stations to air such programs. I am sure that we can select those among us who can most effectively communicate our views to the public.

Encouraging signs from the general public are already emerging. The recent establishment on the West Coast

of a group called iiFAR (Incurably Ill for Animal Research) and its recent participation in a tv forum held in Portland, Oregon, shows that citizens of this country are beginning to fight for the cause of Biomedical Research. What better argument can be used than stating "I am alive today thanks to the use of animals in research," as opposed to the almost pathetic view that "there is no need for animal experimentation to find a cure for diabetes, a healthy diet should be enough." Both statements were made in the above mentioned tv forum.

The biomedical community must wake up and fully comprehend the importance of the animal rights issue. We need to act now and do whatever is necessary, within the boundaries of the law, to protect the progress of biomedical research. I do not have to remind anyone that most of the tremendous advancements in medical science made during our century have been achieved through the use of animals in research. Such advancements should continue and should be favored by adequate supportive governmental policies. It is in our hands to further promote human and animal health, and to carefully protect this goal for the benefit of future generations. In closing,

I would like to reiterate that the future of biomedical research depends on us and, as such, its defense requires our active participation.

Sergio R. Ojeda, D.V.M.

References

1. Ryder R 1975 Victims of Science. Davis-Poynter, London
2. Sharpe R 1988 The Cruel Deception: The Use of Animals in Medical Research. Thorson's Publishing Group Ltd, Wellington, England
3. McCabe K 1986 Who will live and who will die. Washington, p 114
4. Horton L 1989 The enduring animal issue. J Natl Cancer Inst 81:736
5. Cowley G 1988 Of pain and progress. Newsweek December 26, p 50
6. AMA White Paper 1988 Use of animals in biomedical research. AMA
7. Kaplan L 1988 The use of animals in research. Science 242:839
8. National Association for Biomedical Research Uprise 1989 July 21, vol X, No 20
9. National Association for Biomedical Research 1969 Comments on Proposed Animal Welfare Standards. Submitted to the Chief of Regulatory Analysis and Development Staff USDA on July 13
10. Wurtke-Groneberg W 1982 Medizin im National Sozialismus ein Arbeitsbuch. Schwabische Verlagsgesellschaft, Tübingen, Germany, p 321
11. Gallup Poll 1989 June 8
12. Koshland Jr DE 1989 Animal rights and animal wrongs. Science 243:1253