I am the enemy! One of those vilified, inhumane physician scientists involved in animal research. How strange, for I have never thought of myself as an evil person. I became a pediatrician because of my love for children and my desire to keep them healthy. During medical school and residency, however, I saw many children die of leukemia, prematurity and traumatic injury—circumstances against which medicine has made tremendous progress, but still has far to go. More important; I also saw children, alive and healthy, thanks to advances in medical science such as infant respirators, potent antibiotics, new surgical techniques and the entire field of organ transplantation. My desire to tip the scales in favor of the healthy, happy children drew me to medical research.

My accusers claim that I inflict torture on animals for the sole purpose of career advancement. My experiments supposedly have no relevance to medicine and are easily replaced by computer simulation. Meanwhile, an apathetic public barely watches, convinced that the issue has no significance, and publicity-conscious politicians increasingly give way to the demands of the activists.

We in medical research have also been unconscionably apathetic. We have allowed the most extreme animal-rights protesters to seize the initiative and frame the issue as one of "animal fraud." We have been complacent in our belief that a knowledgeable public would sense the importance of animal research to the public health. Perhaps we have been mistaken in not responding to the emotional tone of the argument created by those sad posters of animals by waving equally sad posters of children dying of leukemia or cystic fibrosis.

Much is made of the pain inflicted on these animals in the name of medical science. The animal-rights activists contend that this is evidence of our malevolent and sadistic nature. A more reasonable argument, however, can be advanced in our defense. Life is often cruel, both to animals and human beings. Teenagers get thrown from the back of a pickup truck and suffer severe head injuries. Toddlers, barely able to walk,
find themselves at the bottom of a swimming pool while a parent checks the mail. Physicians hoping to alleviate the pain and suffering these tragedies cause have but three choices: create an animal model of the injury or disease and use that model to understand the process and test new therapies; experiment on human beings—some experiments will succeed, most will fail—or finally, leave medical knowledge static, hoping that accidental discoveries will lead us to the advances.

Some animal-rights activists would suggest a fourth choice, claiming that computer models can simulate animal experiments, thus making the actual experiments unnecessary. Computers can simulate, reasonably well, the effects of well-understood principles on complex systems, as in the application of the laws of physics to airplane and automobile design. However, when the principles themselves are in question, as is the case with the complex biological systems under study, computer modeling alone is of little value.

One of the terrifying effects of the effort to restrict the use of animals in medical research is that the impact will not be felt for years and decades: drugs that might have been discovered will not be; surgical techniques that might have been developed will not be, and fundamental biological processes that might have been understood will remain mysteries. There is the danger that politically expedient solutions will be found to placate a vocal minority, while the consequences of those decisions will not be apparent until long after the decisions are made and the decision making forgotten.

Fortunately, most of us enjoy good health, and the trauma of watching one's child die has become a rare experience. Yet our good fortune should not make us unappreciative of the health we enjoy or the advances that make it possible. Vaccines, antibiotics, insulin and drugs to treat heart disease, hypertension and stroke are all based on animal research. Most complex surgical procedures, such as coronary-artery bypass and organ transplantation, are initially developed in animals. Presently undergoing animal studies are techniques to insert genes in humans in order to replace the defective ones found to be the cause of so much disease. These studies will effectively end if animal research is severely restricted.

In America today, death has become an event isolated from our daily existence—out of the sight and thoughts of most of us. As a doctor who
has watched many children die, and their parents grieve, I am particularly angered by people capable of so much compassion for a dog or a cat, but with seemingly so little for a dying human being. These people seem so insulated from the reality of human life and death and what it means.

Make no mistake, however: I am not advocating the needlessly cruel treatment of animals. To the extent that the animal-rights movement has made us more aware of the needs of these animals, and made us search harder for suitable alternatives, they have made a significant contribution. But if the more radical members of this movement are successful in limiting further research, their efforts will bring about a tragedy that will cost many lives. The real question is whether an apathetic majority can be aroused to protect its future against a vocal, but misdirected, minority.

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