

Animal Research: Covenants and Conflict¹

*I am writing a report on animal abuse.
Please send me materials about what you do.*

*Dear Researcher,
I admire your dedication. Your ability to help people is really amazing.
I hope one day to be someone like you. You have saved many lives. Thank you.²*

—Letters from children to an association for biomedical research

Recognizing Needs and Filling Gaps

There are healers that patients rarely see. They are the researchers that explore the unknowns of the human body and push the limits of science in search of cures. Some work at the bedside, others work at the bench. Regardless of whether they ever treat patients successfully, their search for the answers to the challenges of health and the mystery of disease makes them valuable assets in the world of medicine today. Many of them are physicians and ascribe to a physician's oath, but even those who have not formally taken an oath operate within a covenant of sharing knowledge with their peers for the benefit of the patients they seek to help.

Their work is based on thousands of years of explorations about the nature of illness. Whether exploring evil forces, ill humors, or errant enzymes, they have worked tirelessly, sometimes outside the law—as in the Middle Ages, when dissection of cadavers was illegal—to systematically explore the workings and failings of the body. Despite the millennia of effort, the largesse of researchers, and the cures that they have provided us in modern American medicine, there are still quite a few diseases that can be neither prevented nor cured. The healers who treat us and the researchers who have developed the treatments have tremendous expertise. But even so, some of the therapies they have developed to prevent, treat, or cure our ills are expensive, painful, distasteful, and difficult for us as patients to comply with.

Whether scientists make advances to discover new, less expensive, more palatable solutions for our suffering will depend on a number of factors. Key among them will be our support of researchers' work and innovation. We support innovation through investments in biomedical research, adequate reimbursement for new and better alternatives, and a good supply of well-trained researchers working in well-equipped laboratories. After that, we rely on the hard

work of those healers among us who have chosen the path of discovery, the advancement of knowledge, and the serendipity of science.

We have debated and lobbied each of these various ways to support innovation since government entered the biomedical research world in mid-century. The government contributed to research in a number of ways: providing research funding to agencies, training researchers, and hiring them. The government also granted rewards to the private sector for engaging in discovery. As the government gradually assumed the funding role of wealthy individuals and philanthropic foundations, the matter of biomedical research became a public domain. Research was conducted principally through the National Institutes of Health, though it was also conducted by other agencies, including the Centers for Disease Control and Prevention and the Departments of Agriculture, Labor, and Defense. Public funding allowed all eyes to focus on the nature of research in public institutions, its funding and its management. It allowed us to peer into the organizations, politics, and personalities that guided research for the nation. As discovery in the private sector was recognized as important, investors decided to risk their capital in hopes of finding discoveries and public policies changed to support innovation. Through the tax code, patent laws, purchasing decisions, and trade policy, rewards could be granted to those in the private sector using private capital to create the discoveries that would benefit the public. It was in the nation's interest to ensure that the research ideas and resources flowed freely into the search for cures and the improvement of health. The implications and the dollars at stake were substantial.

As a result, through its public, private, and not-for profit institutions, the nation invested a small portion of its total health care spending—but still a hefty amount of funds—into its research enterprise. Total biomedical research funding in 1997 from both public and private sources was estimated to be \$42 billion.³ No total funding estimates for 2001 are available but since then, from two sources alone—the NIH and the American pharmaceutical companies—the research investment will exceed \$50 billion. Investments from the private pharmaceutical sector have doubled every five years since 1980.⁴ These investments have yielded substantial progress. The span of our lives is longer and the quality of our lives better. Infectious diseases no longer claim the lives of so many of our children; surgical techniques have improved outcomes and led to the wonder of human organ transplants. Research spending to develop therapies and prevent disease created benefits for the economy. For example, diabetes research spending of \$181 million resulted in savings of \$1.2 billion in annual Social Security Disability payments and returned income tax dollars to the Treasury as diabetics were more able to continue working at their jobs.⁵ Kidney research spending of \$9.8 million resulted in drugs that save \$93 million annually in other health care costs.⁶

The examples could fill this book. Research stocked our shelves with over 5,000 prescription medicines, 300,000 over-the-counter products, and countless medical devices and surgical techniques to manage our health. Research also fueled an abundant and promising pipeline for the future. At this time, research costing over \$24 billion is testing 500 new medicines for a dozen uncured diseases that currently cost us over \$600 billion annually to manage, and without preventative or curative answers to just these dozen diseases, medical costs will rise even higher as the nation ages.⁷ More solutions are on the way, for these and other conditions. Computer technologies will create “smart” medical devices; home- and self-care

demands will create new products; and molecular medicine, minimally invasive procedures, and organ replacement options will become common. Research and discovery have never been more promising or worthy of support.

Debating Research

It might seem as if research ventures, as productive as they are, would constitute one of the more placid arenas of public policy. They do not. Lobbying and debates about research programs have had their contentious moments. HIV/AIDS activists fought for increases in research support in the 1980s, convinced that “low” levels of funding were the result of the bias against the groups who had contracted the disease. In the wake of their success in obtaining funding increases, a variety of other groups countered that women’s health, children’s health, cardiovascular health, and other disease conditions were actually more widespread and more deserving of funding than HIV/AIDS. Debates such as these could be protracted and were always political, but they had rarely become truly incendiary except in one special area: research that uses animals as subjects. Whether and when to use animals in the course of making discoveries for the benefit of humans is an issue of longstanding controversy.

Controversy, *per se*, is not new or unusual in research. There are disagreements in virtually every aspect of research. Some of these disagreements are about the priority of the project, the level of funding for particular areas of investigation, or the qualifications of a designated researcher. Others are about the inclusion or exclusion of certain age, gender, or racial groups in the studies, the acceptable degree of patient risk, and the nature of patient consent. The peer-reviewed nature of research helps to surface such disagreements, and by addressing the differences of opinion of the various parties to the research, those projects actually improve.

Scientists do not shy away from controversy because it is frequently productive discourse. Disagreements are eventually resolved, largely through compromise. For the most part, these discussions yield better results of greater utility. Over time, research methods have been refined and have become more efficient, women have been included in clinical trials, drugs have been developed for children, rare diseases have been studied, consent procedures have improved, and human subjects have been better protected through external monitoring of research projects.

One type of research is notable because the conflict seems intractable and relationships among those who might resolve it are deteriorating. In the dispute concerning the use of animals in research, we seem unable to resolve our differences. We cannot even agree to disagree. Instead we have come to blows and bombs. It is only in the area of animal research that investigators must face the reality that their life’s work, even when it creates a cure, will certainly create escalating, violent opposition.

Coming to Terms with Animals as Research Subjects

On April 5, 1999, an estimated \$2 to \$5 million worth of damage and lost research was sustained by two biomedical research facilities at the University of Minnesota.⁸ Vandals

damaged lab equipment, spray-painted walls, smashed computers, and released over 100 animals. Some of the animals were later recovered, dead or hungry, along roadsides. Press reports noted that the Animal Liberation Front claimed responsibility, and a student animal rights group held a vigil in support of the break-in several days later.

The break-in was a violation of the Animal Enterprises Protection Act, and the U.S. Senate had just passed a bill to strengthen the penalties under the Act. Would stiffer penalties be effective? Ingrid Newkirk, co-founder of People for the Ethical Treatment of Animals (PETA), thinks not. She told the journal *Nature* that the Senate action was nothing more than a “knee-jerk piece of legislation,” adding: “Nobody in any social movement has ever been deterred from breaking and entering or arson because the penalties have been elevated.”⁹

Incidents and attitudes such as these are typical of those who oppose animal research and create disruptions in many parts of society today. Children in elementary and high school science classes refuse to perform the types of animal dissections that were once rites of passage for their parents. Medical company executives are targeted for bombings and are followed as they drive home at night. Researchers, their families, and neighbors are attacked and harassed at home and at work. Protesters march outside government and university research facilities, sometimes breaking in, releasing animals, and destroying research records. It’s enough to make some researchers want to quit—and some have.

In news reports, school children and Hollywood personalities are visible, but it is biomedical researchers who are the most highly vulnerable and who bear the day-to-day consequences for our society’s disagreements over animal research. They bear the burden of the nation’s failure to address these disputes immediately and tangibly. Sick people suffer, too, though not always visibly and rarely immediately. Anyone today who lacks an inexpensive, palatable, readily accessible prevention, treatment, or cure for which an animal model is key to the discovery or development of the therapy suffers as a result of these disputes. Even people who are healthy today are affected, as everyone can anticipate that someday they are likely to need cures that will flow from research using animals. Any employer or health care payer that funds care for unrelieved disabilities or pays for palliative care where there are no cures also suffers. Although it is not widely recognized, most people and health care payers are affected by our unresolved conflicts over the use of animals in research.

Addressing the Tensions and Conflicts

Can we engage in a reasoned and rational debate about the use of animals in the biomedical research endeavors that advance medical discoveries? Should we be willing to use animals for research, including the dogs and cats that so many of us see as near-human companions, in experiments that are painful or in ways that restrain them in laboratories? How long will we tolerate animal experimentation while we search for alternatives to animals? Will we stop research in most disease areas because the nature of some animal research is repugnant to some of us? Will patients with today’s incurable diseases be allowed to have a voice in these decisions about animal research? Can we resolve this issue peacefully, or will violence continue to hound the biomedical research community? These are the questions we must address together as we move into this century.

Yet as a society, we have failed to address these tensions. As a result, those healers who have dedicated their careers to research are under fire. Skirmishes and wars surround them and there is no demilitarized zone to assure their safety. There is no truce on the horizon, much less the promise of peace. There are neither cease-fires to anticipate, nor sanctuaries wherein to live and safely conduct research until a treaty is negotiated or animal replacements found. Worse, in the failure of our society to confront this issue, we have turned a blind eye to those who will ultimately bear the brunt of our inability to resolve this conflict: the patients.

How did this happen? Will groups opposing animal research succeed in one of their goals—to end animal research by the year 2020-2030? What will happen to patients who rely on the discoveries that animal research enables? What is the impact of demonizing those on whom scientific progress depends? What perspectives of each side in this debate would enlighten the other? What motivates animal rights groups that might enliven our covenants with each other? What does this have to do with the covenant? Are other beings on the planet—animals in this case—parties to the covenant as well? If animals have rights, do they also have obligations? Does the covenant between researcher/healers and patients supercede any other covenant that other beings might enjoy? Might perspectives on covenant be helpful in resolving these disputes?

Ethical and Moral Views Differ

To those animal rights advocates who oppose animal research, covenant—or some notion like it—is precisely at the heart of the issue. They believe all living beings—trees, animals, fish, birds, and humans—enjoy equal rights to inhabit the world undisturbed. In the minds of animal research advocates, they do not.

Animal research advocates believe that because of the human being's ability to ascertain and behave in "higher" moral ways, human beings have greater authority to oversee all life. This authority extends to preserving and advancing life, even at the expense of sacrificing some lower forms of life for the good of humans. At the extremes, the lines are clearly drawn between the two camps—the animal research camp and the animal rights camp. It is easy to see that they hold different views.

The conflicts between these two camps have become deeply rooted in ethical issues with social and cultural biases. These issues have evolved over time. They also reflect economic realities. In 1860, for example, more than 90% of all Americans lived and worked on farms, caring for and using animals to generate a livelihood. Today, that number is closer to 2%.¹⁰ Any direct experience with the care and use of animals as sources of our food and clothing is virtually gone. In the experience of the average American today, food comes from the grocery already butchered, cleaned, packaged, and even pre-cooked; clothes come off the rack; and animals are not tools to be used, but furry companions with near-human qualities who are to be cared for, loved and respected.

In the case of companion animals, views about their purpose and personalities are clear. We care for our companion animals very well. We purchase toys, clothing, and health insurance for them. We book appointments at salons for their grooming and pleasure. We use them as surrogates for children in childless marriages and companions in single households. Some have

even become “healers” of a sort, visiting the sick and the elderly in Pet Partners programs intended to bring therapy, comfort, and companionship. They have become so important to us that we grieve their deaths and seek therapy to recover from such a loss.

Adaptations to a Changing Society

Other changes have taken place over the last one hundred years as well. Animals became less important for our livelihoods but more important to our life spans. As research methods and opportunities progressed, animals advanced human life by providing biological models to explore diseases and cures. Medical science, as it developed, began to use animals in much the same way as the family farmer, who acted on the belief that God—as reflected in the Judeo-Christian tradition—gave humans dominion over animals and plants for human welfare. Using animals to benefit humankind, therefore, was seen as the true and correct order of things in life, as ordained by a higher power.

The ideology of animal research supporters is based on traditional Western values: human beings are inherently good and have the moral authority to make decisions about natural resources; scientific advancement is positive; profit is desirable; and economic expansion is important for the continued evolution of the human race. This view does not condone needless pain and suffering, or even death, of the research animal, but it does not avoid the unpleasantness of such a task if the benefit is to save the life of a human. These views are in direct opposition to those in the animal rights camp.

The underpinnings of the animal rights supporters are traced to a different view of the world. In this view, human beings are not the pinnacle of creation, but are one of many creatures who are part of a balanced ecological system. Further, the very characteristics that make animals, and primates in particular, ideal research subjects are the same characteristics that should protect them from research risks. Primates, ideal because they are so like humans, deserve the same protections as humans. Specifically, animal rights proponents believe that the biblical approach of human dominance over nature promotes “speciesism,” that is, preferring one species to another in the natural order of things, thus bringing nature out of alignment. They counter biblical notions with claims that Jesus was a vegetarian and would have granted animals their rights. Ingrid Newkirk, the most often quoted authority on animal rights views, has said: “Animal liberationists do not separate out the human animal, so there is no rational basis for saying that a human being has special rights. A rat is a pig is a dog is a boy. They’re all mammals.”¹¹

It is not just in the area of research on animals, however, in which we have witnessed a change in attitude concerning research subjects. Over the past century, our views of research subjects have evolved into ethics in biomedical research. In the early days of this nation, for example, national racial attitudes shaped medical researchers’ views concerning the tolerance of pain. This affected research on Indians and slaves. The European races were viewed as more “hypersensitive” and, therefore, poor research subjects, in studies involving pain, while Native Americans and slaves were viewed as not perceiving pain until they became civilized. As a result, a famous gynecologic surgeon in the early 1800s performed experimental operations on slave women because “Negresses...will bear cutting with nearly, if not quite, as much impunity

as dogs and rabbits.”¹² His view was common among those in the dominant culture of the day. Prior to our relatively recent ethical considerations of pediatric research, children, as well, were used as research subjects without the consent of their parents, exposing them to painful procedures, questionable experiments, and fatal diseases. Nazis performed human experiments without regard to the pain or dignity of their subjects—a fact that is positioned against animal research by artist Judy Chicago in “Why Can’t We Learn from the Past? Dachau/Silver Spring Study for Four Questions.” In this work, which is part of the artist’s major project on the Holocaust, the high-altitude human experiments at Dachau are juxtaposed against experiments on primates at a Silver Spring, Maryland lab. Chicago states: “I keep asking: Where should the line be drawn between human experiments (which are generally unacceptable to most people) with animal experiments (which usually inflict intense suffering on the subjects but which most people accept, particularly if they ‘save human lives’).”¹³

Sophisticated Strategies Emerge

The animal rights groups promote their ideology in a variety of ways, and quite effectively so. Since animal rights groups tend to be more heterogeneous than the animal research groups, they can draw upon a wider variety of tactics for meeting their goals. This enhances the probability of their success. Some are peaceful, others are not. Those that are the most extreme tend to share belief systems anchored in socialist, equality-based views of the world. The more violent have links to the environmental movement and to terrorist organizations—something that is well documented internationally and followed by the Federal Bureau of Investigation. They share some traits with radical groups, as demonstrated by the statements of the most extreme of these activists. These groups view the use of animals akin to the abuse of humans. They see it as so entrenched that only a radical transformation of existing power structures and human consciousness can bring an end to it.¹⁴ For these individuals, animal rights is a cause within a cause. Until the roots of the abuse are weeded from society, there can be no compromise.

Because the groups are so varied, some can act under cover of the others. Those that are violent can work with those that are peaceful to push the limits of their common agenda. Those that are peaceful can work with the animal research community to create incremental change. The general public, for example, believes that the Humane Society is a small, local operation of volunteers who shelter and neuter stray animals. In reality, however, the Humane Society of the United States (HSUS) is a powerful, politically active, national organization that is not affiliated with any local animal shelters or humane organizations. The HSUS operates nine regional offices and is the nation’s largest animal protection organization, with more than 5 million members. HSUS promotes humane stewardship in the use of animals in factory farms, fashion runways, circus tents, rodeo shows, and local animal shelters.¹⁵ But it also spends millions of dollars lobbying to eradicate a major segment of biomedical research that is dependent on animals. Although its activities are not violent, its leadership has grown more radical over the years, and some of the more extreme activists align themselves with HSUS initiatives.

Securing Public Support

Animal rights groups have positioned themselves as caring individuals who are knowledgeable about the irresponsible practices of researchers. They also claim, and have been able to sustain due to the absence of compelling counter-claims, that there are alternatives to the use of animals in research. The decision to eliminate animal testing made by a consumer products company as significant as Proctor and Gamble confirms this view.

Animal rights groups have mastered the sound bites of modern communications. Further, and most interesting, they have succeeded in maintaining a favorable public image. Despite the presence of terrorists within their ranks they are perceived as reasonable, compassionate individuals. Terrorist actions, such as threats against researchers and research lab break-ins, occur with relative frequency. Hundreds have been recorded over the last ten years, and in the last year alone militant activists have destroyed years of research and caused millions of dollars in damage to facilities. Yet animal rights groups have not lost favor with the public. In fact, they are very effective in securing public sympathy.

Animal rights groups are also effective in securing public policy support. They use litigation to increase lawsuits against animal research facilities. They use regulation to increase inspection of research facilities and reduce the use of certain species in biomedical research. They use state, local citizen, and parent participation in educational curricula to eliminate animals in science dissection lessons. They raise the barriers for the use of animals in public and private research centers, requiring ever greater care of those animals. They make communications about animal research increasingly difficult and risky. Though some tactics, taken individually, may seem trivial, collectively these incidents amass momentum and visibility and create precedents for new animal research barriers. Here are some examples:

- On April 21, 1999 the Supreme Court denied a petition appealing a federal appeals court ruling that gave human beings the right to sue on behalf of animals. This gives animals a standing in the judicial system.
- The Animal Legal Defense Fund ties up researchers' time and funds by suing the research community. The intention is to do this so often that researchers "won't know what courtroom they are supposed to appear in that day."¹⁶
- The Great Ape Project, backed by the Animal Legal Defense Fund, was a ballot initiative to give Great Apes human rights in New Zealand. Because New Zealand has no Great Apes, it was chosen as the location to initiate this change in public policy on the assumption that no interest or opposition would surface from the public. The initiative has failed so far, but if it succeeds it will create the first policy of its type and would create a precedent for similar policy efforts in nations that do have Great Apes.
- In England, animal rights activists orchestrated a campaign against Huntington Life Sciences, including abuse, intimidation, threats, property damage, arson, and physical assaults on people. A barrage of unwanted letters and packages was sent to

employees' homes, company switchboards were jammed, and the financial backer of Huntington, NatWest, was targeted as well. Jail terms resulted for several members of the activist group, but not before Huntington lost its financial backers in the United Kingdom. The activism moved to the U.S. as activists targeted Stephens, Inc, a new Huntington backer, attempting to breach security at the office and blocking the street as workers attempted to leave for the day.

- Charitable groups have been targeted as well, attempting to stop donations to the March of Dimes because it is so dependent on public funds, fundraises over a short period of time, and hosts a major event—WalkAmerica—which is subject to easy disruption.
- In the United States, the 1966 Animal Welfare Act applies to all research facilities that use animals designated by the U.S. Secretary of Agriculture, including guinea pigs, hamsters, gerbils, rabbits, dogs, cats, non-human primates, marine mammals, farm animal species when used in biomedical research, and warm-blooded wild animals. Laboratory rats, mice (except field mice), and birds are not covered. The HSUS has petitioned the U.S. Department of Agriculture to add laboratory rats, mice, and birds to the list of designated animals. This would lead to annual inspections and detailed reports to account for each animal used in research. Since mice and rats comprise 90% of the animals used today, this expansion would create a substantial administrative and financial challenge for researchers.
- Finally, chimps bred in the early years of HIV/AIDS research are being phased out. Since they live up to 35 years past their time as research subjects and it is illegal to euthanize these animals, retirement communities or sanctuaries for chimps have been proposed. A task force of six animal rights groups has proposed The National Chimpanzee Research Retirement Act to advance this cause.

As radical as the actions of some animal rights groups might be, do they have a perspective that merits attention by the animal research culture? What steps should animal researchers take to resolve these seemingly intractable conflicts? Will the views of animal rights activists today represent yet another step in the evolution of human compassion? The attitudes and experiments performed on humans in the past one hundred years would be unimaginable today. Will we look back one hundred years from now and view this era as horrific for its use of animals? Is there a way to capitalize on the compassion, dignity, and humanity expressed in the animal rights views? Should there be greater protections for animals? Can we move deliberately to create alternatives to the use of animals in research? Can we protect animal research in the meantime? Can we find alternatives, not just for the benefit of the animals, but for the researchers and patients as well?

Defending Animal Research

Animal research defenders have so far proven to be no match for their opponents. In budgets they are outdone. It is estimated that animal groups collected more than \$300 million in donations in 1998, while the two major animal research defense groups had budgets of less than

one percent of that number. The efforts of the animal-rights opposition are successful and increasingly easy because the political landscape of the nation has shifted on this issue. The political environment has become more favorable toward the animal rights ideology as mainstream America has moved center-left on issues such as this. It is no longer easy to counterbalance the varied tactics of the animal rights groups within such a receptive environment. As a result, biomedical researchers supported by for-profit health care companies cannot be as vocal in defending animal research as they once were because the profit motives are suspect. Those supported by government grants and working principally in academia are also hampered, as the security systems that protect them and their research projects are inadequate for the potential threats harms for the more violent groups. The changed landscape makes researchers' politically incorrect views risky, especially in the context of today's disengaged public. The good intentions of researchers and even the clear, unmet needs of patients are not yet persuasive.

Animal research groups face other challenges also, and as a result they are no match for the tactics of their animal rights opponents. Communication plans are underfunded and are too diffuse to counter the specific targets of the animal rights groups. Animal research groups tend to be smaller, more homogeneous in their make-up, and more similar in their tactics than animal rights groups. They tend to focus on education and information about the value of research, science, and discovery. In the course of their educational messages they provide information about those projects that use animals, but because animal research is by no means their only message, the animal use components of the message are diluted. Academic, government, and private sector researchers are active in these educational and legislative lobbying projects in partnership with groups such as the National Association for Biomedical Research (NABR). They join state-based groups similar to NABR to educate school children and teachers on the importance of scientific discoveries in an effort to balance the anti-animal research messages now actively promoted to children by the animal rights groups. These activities are intended to help maintain whatever opportunity the animal research community has left, as the animal rights ideology progressively gains ground. Unfortunately, though, they distract researchers from a life's mission to discover cures and place researchers at even greater risks of retaliation.

Even these limited educational activities are vulnerable, however. Animal researchers are caring, compassionate, committed, and hardworking. Some are eloquent and passionate spokespeople. But most are afraid to speak out on the issue. Frankly, passion and commitment alone will not stem the tide of increasing barriers to animal research. The animal research community has attempted to identify and promote alternatives to the use of animals in research. Johns Hopkins Medical School houses the principal center for the study of alternatives, and numerous other groups in the private sector are seeking, albeit in limited ways, to end their use of animals. The National Institutes of Health and a number of health care companies have provided funds for such purposes.¹⁷ Alternatives are emerging, and some are adequate replacements. There are not yet enough animal alternatives for use in the lab, however; nor are those alternatives adequate to demonstrate safety and efficacy to the Food and Drug Administration (FDA) in compliance with its regulations for drug or device development and approval. Until the alternatives are accepted by the FDA, animal research must continue. Frankly, even the tangible products of their efforts—the medical discoveries, surgical procedures, pharmaceutical products, and insights into behavioral and physical mysteries—may

not be enough. The balance between the rights of animals and the needs of patients has not been met, and the dynamics are tipping the scales away from research.

Engaging the Covenant

Unless a more productive dialogue is engaged between the animal rights and animal research communities, and unless patients and other healers become parties to the discussion, the animal rights effort is steaming ahead toward success in ending research on animals. The politics, the ethics, the economics, and the harassment will likely drive researchers and the use of animals out of the research enterprise. These threats to our national research endeavors have not ended with the September 11 terrorism experienced here—in fact, they have escalated. Animal rights extremism has continued with fire bombings, break-ins, and animal releases. As the Federal Bureau of Investigation is distracted on other fronts, addressing airline crashes, anthrax mail, and other national security issues, its resources have been diverted away from animal activist tactics.¹⁸

The result of such an outcome is not yet fully clear. Even today, animal research groups would like to reduce and, to the degree possible, eliminate the use of animals in their studies. Their long-term goals are similar to those of the animal rights groups. Animals are an expensive way to gain new knowledge and researchers are not, at heart, sadistic. It is the short-term goals of the researchers that are at odds with those of the animal rights groups. Researchers are not able to eliminate animals from studies at this time because there are not sufficient, legitimate alternatives. Regulatory agencies that approve products used by humans, and even by animals in their clinical care, do not sanction non-animal models as proof of safety and efficacy.

Given that both animal rights and animal research interests agree on the long-term objective, it seems that the issue is not one of whether science will end research on animals, but when and how. The HSUS initiative to end research involving unrelieved pain and distress in animals may or may not be met by its 2020 target, but the likelihood of ending all animal research within the predictable future is certain. It is likely that our children, or theirs, will live in a world in which researchers will not be using animals to explore health and disease. Alternatives will be sufficient, and regulatory requirements will be adjusted accordingly.

How will we continue discovery in the meantime? Will scientists continue to work under fire or will we come to peace? Who will tell today's impatient patients that they will not have treatments and cures for what ails them because the quality of an animal's life is more important than their own? How will we explain to our children that their diseases of middle and old age may not be treated for lack of knowledge and products? Conversely, how can we tell them that we allowed the research procedures that so many of them considered barbaric? How will new drugs be developed and proven safe for testing in humans if they have not yet been tested in animals? Can we accelerate the search for alternatives to animals? Will the nation provide better protection for its researchers/healers who use animals until alternatives are available? If animals have rights within the covenant, do they have responsibilities? If they join in the covenant, who will speak for them in creating and sustaining their reciprocal responsibilities to humankind? How do we engage the balance and seek the proper course within the covenant of care and discovery?

We in this nation have a covenant responsibility to those patients who are ill and with those researchers/healers who seek the cures to treat them. We also have a responsibility to the large segment of our fellow citizens who feel so strongly on this issue. As a nation, we have a responsibility to hear both voices—the one that calls for caring through discovery, and the one that calls for caring by ending research on animals. We have a responsibility to seek a peaceful resolution to the conflict. It would be a breakdown of the covenant of healing to allow these conflicts to threaten researchers and delay discoveries to cure disease. National leaders in research, clinical care, and government should create the forums, act as the arbitrators, engage the referees, and participate in the resolution. They should call upon those who are now activists to change their tactics, shift their focus, cease their violence, and seek peaceful solutions.

- It is through informed debates, rather than inflammatory rhetoric and terrorist activity, that this conflict should be resolved. In the meantime, in order to facilitate a resolution, it is time for a truce and a temporary cease-fire so that a real dialogue can begin. This dialogue must address how best to continue progress in discovery while we explore alternatives to animal research.
- Each side should acknowledge the concerns and views of the other, especially with regard to commonly held views. In this debate, the two sides have assumed polarizing positions and have hardened those positions over time. Demonizing the opposing side is not a productive road to resolution at a time when reason must prevail. The reality is that the goals of the “other” are not dissimilar and their common ground is big enough for both. Both animal research and animal rights advocates would like to end the practice of conducting animal research. Joint recognition of that fact should expedite their mutual goals to identify alternatives and to institutionalize them within the research and regulatory frameworks of discovery.
- Particularly with regard to the views of animal rights advocates, it is time for animal research supporters to listen carefully to the messages about humanity that are embedded in the ethics of animal protection. Here, in the new millennium, those views challenge the notions of who we are as a human species and may teach us important lessons about the value of life for the next one thousand years. Those views may lead to major social changes in the allocation of resources to programs that support children, the underserved, and the elderly in ways that we do not address comprehensively in this nation or on the globe today.
- Once the opposing sides have recognized their common ground and reached an agreement on the nature of the objectives, they should develop practical steps and a joint agenda for accomplishing the end goal. Doing so might include creating a timetable, a process, and increased funding for such activities to reduce any unnecessary use of research animals; developing alternatives to animals; ensuring the safety of researchers, their families, and their projects; and providing the most compassionate care of animals used in research.
- The groups should encourage responsible, mutually satisfying behavior among their members and should agree to monitor and police their own factions.

- Local, state and federal governments should assist with laws, regulation and enforcement actions that prevent and prosecute violence against researchers and property.
- Improper handling of research animals and known violations of lab animal standards by researchers should be prevented and prosecuted as well.

Years of hostility and opposition are not fertile ground on which to seek a truce, a compromise, and eventual peace. It will be difficult for the opposing sides in this controversy to work together, but it is the responsibility of both sides to do so. It will be difficult to call upon those activists who have been demonized and invite them into a covenant of caring for people through discovery. I believe that it is the community of healers who must make the first move, however, and do precisely that.

In fact, there is little other choice. When healers choose to embrace covenants, they must take all necessary steps to meet their obligations within the covenant. In this case, fulfilling those obligations entails engaging opponents who disagree with views about animal research. If healers today fail to take these steps, they will have failed within the most important covenant of all: the one that heals the patients that healers are sworn to help.

¹ This appeared originally in 2001 in *Covenants: Inspiring the Soul of Healing*. Readers interested in exploring covenants in greater depth can find background in *The Origins of Healing as Divine Gift and History and Modern Applications of Covenant Healing Traditions* which appear in this series.

In summary, healing traditions are based on ancient views that healing skill came from the divine. Healers were aligned with divine forces against the terrible, unknowable and sometimes evil forces of illness. As a result, healer-patient relationships were structured as covenants. Covenants differ from contracts. Contracts have a defined beginning and end and specify the duties of the parties in detail. Covenants do not end and do not detail the duties of the parties.

There are two types of covenants, both are relevant in health care and are expressed in oaths taken by clinicians and others in health care. The first type – a covenant of *grant* – defines what one party does for another, without conditions or expectations. Parents have covenants of this type with their children, providing them food, shelter, clothing and protection. The second type – a covenant of *obligation* – involves mutual promises between the parties. Spouses enter into this type of covenant ‘...for better or for worse.’

The *Oath of Hippocrates*, a classic covenant statement, contains both types. It creates a covenant of *obligation* with other healers, calling for the oath-taker to “...study, learn and teach my fellows...and to treat his sons as my sons.” Then, the oath “...grants health...” to the patient. The *Prayer of Maimonides*, an oath created later, contains the same covenant of *obligation* among healers and calls patients into a covenant of *obligation* as well, asking that patients follow medical advice, take prescriptions and avoid the advice of meddling friends and relatives uninformed about health and disease.

The book suggests that everyone in health care – not just clinical experts but those in any role in research, management, insurance, health reporting and even policy – are the sophisticated extension of ancient tribal healers. Our societies are more complex, as is our knowledge, our data and information, our technology and our systems of providing care. As a result, as healers we have entered healing streams of an ancient origin. Our patients and communities expect us to ascribe to these covenant values.

In my view – and I am not alone in this – health required the integral relationship among healers, patients and communities. I therefore proposed three steps to transform health: first, a covenant of obligation among all healers,

as I broadly defined them; second, a covenant of obligation with patients; and third, a covenant of obligation with communities, as well.

This is an application of those ideas to the policy issues addressed here.

² Jayne Mackta, "The case for communication," *Lab Animal*, February 2000, 29(2):38-40.

³ Purnell Chopin, "Report from the president," *Howard Hughes Medical Institute Bulletin*, December, 1998. Available at <http://www.hhmi.org/annual98/report/index.html>. Accessed December 23, 1999.

⁴ Pharmaceutical Research and Manufacturers of America, *2001-2002 Annual Report: New Medicines, New Hope*, PhRMA, Washington, D.C., 2001, and *Statement on the President's 2002 Budget Request*, at [www4.od.nih.gov/office of budget/press2002/pdf](http://www4.od.nih.gov/office%20of%20budget/press2002/pdf). Accessed November 20, 2001.

⁵ Lawrence Goldstein, "Investing in tomorrow's health care today," *Howard Hughes Medical Institute Bulletin*, February, 1996. Available at [http://www. hhmi.org/communic/bulletin/Feb98/invest.htm](http://www.hhmi.org/communic/bulletin/Feb98/invest.htm). Accessed December 23, 1999.

⁶ L. Goldstein, Available at [http://www.hhmi.org/communic/bulletin/Feb98 /invest.htm](http://www.hhmi.org/communic/bulletin/Feb98/invest.htm). Accessed December 23, 1999.

⁷ Pharmaceutical Research and Manufacturers of America, *1999 Industry Profile*, Washington, D.C.: PhRMA, 1999, p. 13.

⁸ Information available at <http://www.AMProgress.org>. Accessed February 11, 2000. Other activist activity at the University of Minnesota can be found in: Will Woodward, "On campus, animal rights vs. animal researchers: University of Minnesota emerges as a focal point," *Washington Post*, November 5, 1999, p. A01.

⁹ Meridith Wadman, "U.S. Senate gets tough on animal activists," *Nature*, June 3, 1999, p. 397.

¹⁰ U.S. Department of Agriculture, Office of Communications, *Agriculture Fact Book*, Washington, D.C.: USDA, 1996

¹¹ Katie McCabe, "Who will live and who will die?" *The Washingtonian*, August 1986, p. 114.

¹² Cited in Martin S. Pernick, *A Calculus of Suffering: Pain, Professionalism and Anesthesia in Nineteenth-Century America*, New York: Columbia University Press, 1985, p. 156.

¹³ Vicki D. Thompson Wylder, *Judy Chicago: Trials and Tributes*, Tallahassee, Florida: Florida State University Museum of Fine Arts, 1999.

¹⁴ John G. Hubbell, "The 'animal rights' war on medicine," *Reader's Digest*, June, 1990, pp. 70-76.

¹⁵ Personal Communication, HSUS Office of Membership.

¹⁶ Report of confidential interviews, cited in New Jersey Association for Biomedical Research, *The HSUS 2020 Initiative and Animal Rights*, Strategic Health Policy International, 1999.

¹⁷ The total amount of funds dedicated to identifying alternatives to the use of animals in research has not been tallied, but is estimated to be well over \$7 million annually. Funds are provided by both public and private sector sources, including the National Institutes of Health, the National Toxicology Program, the Johns Hopkins Center for Alternatives to Animals in Testing, Proctor & Gamble, and the Alternatives Research and Development Foundation. Personal communication with Joanne Zurlow, Ph.D., Associate Director, Center for Alternatives to Animals in Testing.

¹⁸ Sam Howe Verhovek, "Radical Animal Rights Groups Step Up Protests," *New York Times*, November 11, 2001, p. A24, col. 1.