

WellBeing International

## WBI Studies Repository

1987

### Animal Rights Coalitions Coordinator's Report '86

Animal Rights Coalitions

Follow this and additional works at: <https://www.wellbeingintludiesrepository.org/anircoa>

---

#### Recommended Citation

Animal Rights Coalitions, "Animal Rights Coalitions Coordinator's Report '86" (1987). *Animal Rights Coalitions*. 3.

<https://www.wellbeingintludiesrepository.org/anircoa/3>

This material is brought to you for free and open access by WellBeing International. It has been accepted for inclusion by an authorized administrator of the WBI Studies Repository. For more information, please contact [wbisr-info@wellbeingintl.org](mailto:wbisr-info@wellbeingintl.org).



# ANIMAL RIGHTS COALITIONS

## COORDINATOR'S REPORT '86

### New Strategies Fuel Progress, Promise Even Greater Gains

Since 1836, when the humane movement began, the number and financial resources of animal protection groups have grown enormously. Unfortunately, the number of animals victimized and the intensity of their pain has grown even more.

However, in the past decade our coalitions have begun to make real progress. The key to our success has been in providing alternatives to individuals and organizations whose approaches we wish to change.

We have helped the corporate sector and the scientific community to recognize that it was not necessary to choose between animal and human welfare. We have stressed, and it has become apparent, that non-animal alternatives to traditional methods are not only better science, but can also be faster, cheaper and more reliable.

This new liberated outlook has guaranteed on-going interest, involvement and progress on the part of industry, academia and government, and has resulted in multiple steps forward, including the 75% reduction in acute toxicity tests such as the LD50; the opening of centers for alternatives to animal experimentation and the development of an entirely new branch of science, — non-animal safety testing.

#### What factors promoted critical mass in animal rights?

1. The movement received a rational philosophical framework from Peter Singer's manifesto *Animal Liberation*, which demonstrated that animal rights depends not on sentimentality, but on justice.
2. The development of a step-wise political method for changing people's minds, for creating stepping stones of cooperation where formerly there were only walls.

Continued Page 2.

### MILESTONES

- While as yet unannounced, Ralston Purina is in the process of providing initial funding for "euthenics" programs at major agricultural schools. Euthenics, a new science, seeks to develop optimal living environments for farm animals — emphasizing the reduction of suffering and stress. Specifics for these programs are still under discussion.
- A recent survey by a Food & Drug Administration (FDA) center shows a 96% decrease in classic LD50 tests between 1985 compared with the period between 1975 and 1979. The FDA Center Director, Dr. Gary Flamm, found these figures "encouraging signs, indicating that the classical LD50 test is becoming a thing of the past."
- The Soap and Detergent Association and Bausch & Lomb are currently funding projects that will identify the most promising alternative methods to the Draize. Several leading corporations, including Armour-Dial, Colgate-Palmolive, Johnson & Johnson, Revlon, Shell, Unilever, have already begun to include some of these alternatives in their own labs.
- On a particularly hopeful note, Charles River, the world's leading lab animal breeder is diversifying into in-vitro techniques for producing monoclonal antibodies.

**ANIMAL RIGHTS INTERNATIONAL: COALITION TO ABOLISH THE LD50 and DRAIZE TESTS, COALITION FOR NONVIOLENT FOOD**  
Box 214 • Planetarium Station • New York, NY 10024 © 1986

**Coordinator:** Henry Spira. **Patron:** Pegen Fitzgerald. **Advisory Committee:** Cleveland Amory, Robert A. Brown, Sonia Cortis, Frederick J. Davis, Pegen Fitzgerald, Robert M. Ford, John A. Hoyt, Holly Jensen, Ann Koros, John F. Kullberg, Sid & Helaine Lerner, Cheryl Mouras, Linda W. Petrie, Diane Stiles, Jeanne & John Waller MD, Palmer Wayne. **Science Advisors:** Leonard Rack, MD, Andrew N. Rowan, BSc MA DPhil. **Legal/Legislative:** Elinor Molbegott, Esq. **Sponsoring Organizations:** ASPCA, Animal Protection Institute, Fund for Animals, HSUS, MSPCA, Millennium Guild, NEAVS, VIL

THE COALITION COMPRISES MORE THAN 400 ORGANIZATIONS WITH A MEMBERSHIP IN THE MILLIONS.

## NEW STRATEGIES

Continued From Page One.

We sought a cascade effect by planning a sequence of ever-enlarging winnable battles which were often based on ideas suggested by the science community itself, thereby gaining not only the support of the general public, but of scientists as well.

We chose to push for practices which, if adopted, would leave everybody a winner, emphasizing the benefits of working together rather than needless confrontation.

We always began with discussion rather than political confrontation, although we did not hesitate to play hard ball when warranted. At the first sign of responsive action, we sought to welcome former "opponents" as collaborators.

For example, our criticism of the American Museum of Natural History's cat sex experiments, rapidly won support in the science community. The experiments were repetitive, unfruitful and unnecessarily cruel. The wave of consensus opinion effectively ended the funding for this prolonged nightmare.

Next, we turned our attention to the cosmetics industry where the Draize rabbit blinding test is routinely used. It measures the harmfulness of chemicals by observing the damage caused in the eyes of conscious rabbits. Though we attempted discussion with the industry flagship, Revlon, their officialdom was mired in old ways of thinking. However, once we publicized the issue, we rapidly gained a consensus, at every level of sophistication and in every corner of the community. This again led to a dramatic turnaround. Revlon funded the establishment at Rockefeller University of a research unit devoted to seeking cell biological and other humane alternatives to the barbaric Draize test.

This initiative legitimized alternatives research. It was rapidly followed by the Center for Alternatives to Animals in Testing (CAAT) at prestigious Johns Hopkins University and

recently has spawned similar multi-million dollar programs in West Germany and Switzerland.

And the research efforts are now beginning to pay off. New techniques have been developed and some are now being validated prior to practical application.

Thus, the Soap and Detergent Association and Baush & Lomb have funded projects to indentify the most promising alternative methods to the Draize. The objective is not necessarily to find a "perfect" eye irritation test — the Draize itself is recognized as imperfect. Instead, the trade associations will select the most promising non-animal tests so that major corporations can, in a uniform manner, incorporate these alternatives into their standard testing procedures.

Some leading corporations such as Colgate-Palmolive and Armour — Dial, have already begun to include eye irritation alternatives in their own labs. Meanwhile, federal agencies have curbed some of their most indefensible practices. Thus, substances known to be irritants, such as lye, ammonia and oven cleaners, need not be re-tested in the eyes of rabbits. Requirements are being harmonized so that data can be shared, and the suggested number of rabbits per test has been reduced by one-half to one-third.

But what's most encouraging is that preliminary test results have increased the interest within the science, governmental and corporate sectors — *enough to make the search for alternatives a self-sustaining endeavor.*

### What was our next step?

For years, an increasing, but as yet ineffective tide of scientific opinion had concluded that the prominent benchmark of toxicology, the LD50, represented a useless, cruel and pseudoprecise ritual whose replacement was inevitable.

The LD50 is the standard, routine, and extremely painful 59-year-old death test which measures how

much of every chemical, per body weight, kills half of groups of 40 to 200 animals.

Five years ago, there was near-unanimous agreement within the toxicology community that the LD50 was the cornerstone of safety assessment. Now, there's equally unanimous agreement that the LD50 is unnecessary, even a hindrance to the development of better testing methods. And this change was not due to new discoveries, but to critical re-evaluation that resulted from the publicity we gave to the science community's own criticism of the test.

At an international meeting at Hopkins, followed by a Food and Drug Administration (FDA) meeting, regulators, scientists and animal rights representatives agreed that this cruel poisoning test will be replaced by more elegant alternatives that would produce less death and suffering. The FDA announced a "clarified" official policy that concluded that the LD50 is not required and that the FDA and other regulatory agencies must move to clarify this position to industry.

### What were the results of these efforts?

Mid-1985 surveys by our coalition show a reduction of approximately 75% over the past three years in the number of animals used for acute oral safety testing. The decrease was attributed to the use of "limit" and "range-finding" tests as well as to increased use of data banks.

And a recent survey by a Food & Drug Administration center showed a 96% decrease in classic LD50 tests between 1985 compared with the period between 1975 and 1979. The FDA Center Director Dr. Gary Flamm found these figures "encouraging signs, indicating that the classical LD50 test is becoming a thing of the past."

In order to maintain this momentum, our coalitions are continuing to focus on both industry and the regulatory sectors.



We have initiated discussions with the Cosmetic, Toiletry & Fragrance Association, among others, concerning two major programs which need to be implemented as rapidly as possible:

1. that the industry commit itself to eliminate the use of animals in testing and develop an innovative and feasible strategy and timetable to implement such a commitment, and,
2. that the industry launch an animal-use audit by an outside organization which would also identify creative and successful steps taken to reduce and replace animal use and suffering. These findings would encourage the transfer of methods and technologies throughout the industry.

In addition, we have discussed setting up a review of regulatory practices and needs with several major corporations. Such a study would provide the documentation needed to eliminate conflicting and redundant "guidelines" and, therefore, reduce the numbers and the suffering of animals used. The report would also evaluate what is necessary to actually replace current animal tests with alternative methods.

#### Where do we go from here?

Our most recent effort employs the same strategic principles.

The treatment of farm animals has been brutal. The facts have been unknown, or when known, overwhelming. For example, under the present system, some piglets are confined to double tier cages with those below being defecated upon by those on the upper level; veal calves are kept virtually immobile and in darkness; egg-laying hens are so tightly confined, they are unable to spread their wings.

How can the quality of life of these animal victims be improved?

Opportunities exist to join forces

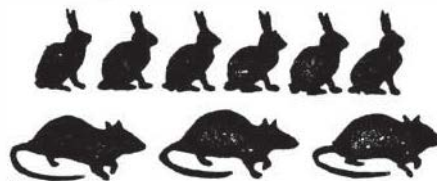
with already existing scientific interest in animal stress reduction, an area pioneered by Temple Grandin. We are discussing the possibilities with agricultural scientists and with representatives of agribusiness. We are pleased to note that progress appears possible. However, it is vital that we do not cause more animals to be stressed in the name of research to reduce stress.

Of course, euthenics does not address the fact that animals are being raised for slaughter. But to be both realistic and effective, as long as people continue to eat animals, we must work towards minimizing the massive suffering animals are forced to endure.

We are addressing the broader issue by working towards making meatless food an available option for the general public. This requires that we first develop alternatives that are healthy, tasty, easy to prepare and price competitive and ensure that they are readily accessible. Currently, we are working to introduce these alternatives in supermarkets and fast-food outlets. We believe that the American public's increasing interest in living and eating healthy will make it easier to introduce vegetarian dishes into the mainstream diet.

We feel that each of these quantum leaps has supported the next, as we moved from 60 cats in our American Museum of Natural History protest to hundreds of thousands of rabbits in the Draize campaign to the millions of animals in the painful LD50 death test to the literally billions of animals traumatized in factory farms.

Dreams that at first seemed impossible have been realized through a powerful combination of realistic and winnable objectives and innovative thinking. ■



## ON A PERSONAL NOTE

I have used "we" rather than "I" throughout this paper to indicate that both the actions and the ideas are the product of a loose organization of many concerned individuals, including: Pegeen Fitzgerald, Elinor Molbegott, Linda Petrie, Leonard Rack, Andrew Rowan and Palmer Wayne.

It has been our objective to work for effective change through a combination of careful planning, high impact campaigns and a constructive dialog with those in a position to bring about measurable change.

Our policy has never been to accumulate large funds for eventual, but unspecified, disbursement. Instead, all campaigns have been funded with specific donations to cover expenses as the need arises. Our routine research, office, telephone and travel are currently paid by Pegeen Fitzgerald (Millennium Guild). She deserves special thanks for her unwavering support. To date, we have operated on a total budget of less than \$25,000 a year.

However, as you can see from this report, we intend to increase the momentum of our ongoing campaigns and expand into, among other areas, the factory farm arena. To support this effort, we have recently established the Coalition for Non-Violent Food. We have also established Animal Rights International (ARI), a tax exempt organization which will provide support for all our coalitions.

Our final goal is to create a society in which creative genius and technology raises the quality of all life; where we live in harmony with one another — with human and nonhuman animals, and with all of nature. We will get there not by crying or wishful thinking, but by understanding and effective action.



Henry Spira

# HERE'S WHAT YOU CAN DO TO MAKE A DIFFERENCE

## FACTORY FARMING

In a world where cruelty to animals has become massive and institutionalized, it is a matter of record that 95% of animal suffering is in factory farming — where more than four billion animals suffer from birth to death on these farms every year.

However, even activists who want to focus on farm animals may feel overwhelmed by the magnitude of the problem. One of the key elements in this frustration may be the unthinking acceptance of the absolutist "all or nothing" syndrome. However, self-righteous demands for immediate vegetarianism, if they cripple one's strategic thinking, will lead to neither short nor long-term results.

Recently, because of a move towards step-by-step tactics, progress has been made in reducing lab animal pain, an area that, just a few short years ago, seemed equally insurmountable. This was accomplished by setting up a series of realistic and winnable goals — with meticulous planning, timing and coordinated execution.

We believe the above methods can and now must be adapted to the plight of farm animals. Thanks both to enlightened consumer interest and to the trailblazers — Bob Brown, Michael Fox, Dudley Giehl, Alex Hershaft, Frank Loew, Peter Lovenheim, Brad Miller, Melinda Marks, Jim Mason, Paul Obis, Andis Robeznieks, Nellie Shriver, Christine Stevens, to name a few — we now see the opportunity for meaningful change.

Let's reduce the largest area of animal pain and suffering.

Write your two senators (U.S. Senate, Washington, DC 20510), and your representative (House of Representatives, Washington, DC 20515) and urge them to address the plight of farm animals. Here's a sample letter:

I am very concerned over the lack of any Federal standards regarding the humane treatment of farm animals. Under the present system,

veal calves are kept virtually immobile from birth to death in dark, narrow stalls and egg-laying hens are confined in small wire cages, unable to even spread their wings. These animals are unable to perform even the most basic act — the freedom to move their bodies. Surely, that's the least any creature — human or nonhuman — ought to be able to do.

Legislators in other countries, such as Switzerland and West Germany have taken steps to improve conditions on farms. Similarly, I urge you to introduce a resolution expressing the fundamental right of every farm animal to comfortably turn around. In addition, I urge you to call on Secretary of Agriculture Lyng to establish minimum standards for farm animals and for the US Department of Agriculture to fund research programs to reduce the pain and suffering of farm animals. I look forward to hearing from you.

Sincerely,

Every state has at least one publicly supported agricultural college teaching farm animal husbandry and conducting research on farm animals.

Make arrangements to visit your state ag school (write us for further details) in order to let them know that there is increasing public interest in the quality of life of farm animals and send your report of conditions so that, together, we can follow up.

## NIH

Your tax dollars support the federal government's National Institutes of Health — the USA's main promoter of lab animal research.

In November 1985, Congress directed the NIH to promote: the replacement of animals; the reduction of the numbers of animals; and refinement of procedures to lessen the pain and suffering.

To ensure that these words are transformed into action, we need to let Congress know that there is broad public support.

Write to your two senators and your representative. Urge them to request a progress report from the Director of NIH and follow up with a request for a status report every six months. Here's a sample letter:

As you are aware, Congress has directed the NIH to promote alternatives to the use of lab animals. I strongly support such efforts, and am anxious to know what the NIH has done and is planning to do in this area. Please keep me updated.

## PRODUCT TESTING

Write to as many companies as you can, particularly pharmaceutical companies, asking them what they have done, are doing and are planning to do to phase down and phase out animal pain and suffering.

Here's a sample letter. Address it to the president or chief executive officer. You can obtain their names and addresses (if it's not on the product) from your local library.

I'm aware that your company uses large numbers of animals for product testing. As a regular consumer of . . . I'd appreciate detailed information outlining what you have done and are doing to reduce the pain and the numbers of animals used to develop and test your products.

If they respond with lots of generalization and 'good intentions,' then tell them you're still awaiting information that demonstrates measurable progress. Send copies of the letters to the company's board of directors and your local newspapers.

If they remain unresponsive, buy one share of their stock and ask your questions at their annual meeting and notify the press of your intentions (especially if your colleagues are performing street theatre outside!).

## EDUCATION

Congress' Office of Technology Assessment Report on Alternatives (February 1986) concludes that "although far fewer animals are used



in education than in either research or testing, animal use in the classroom plays an important role in shaping societal attitudes toward this subject."

We believe that by stopping vivisection and dissection in high school and science fairs, we will create a generation of citizens who will not tolerate the routine and massive exploitation of animals in the labs.

To accomplish this, all of us must challenge our local school systems to stop programming youngsters to treat animals as mere lab tools. Cruelty inflicted upon defenseless, innocent nonhuman animals cannot be considered a worthwhile classroom activity. And here's what you can do about it:

1. Say NO to dissection. You have the right to refuse to participate in any harmful activity. If you believe that harming others is wrong, no one can force you to act against your beliefs.
  2. Organize students and parents to stop hands-on killing in schools. Schools cannot justify the pain and suffering and terror and death of an animal who harms no one.
- Talk to the science teachers.
  - Petition the school's principal.
  - Ask the school paper to report on this issue.
  - Contact local and national media — TV, radio and newspapers.
  - Contact Rosa Feldman's Student Action Corps for Animals, Box 15588, Washington, D.C. 20003-0588. Telephone: (202) 542-8983.

### FOCUS ON THE MEDIA

- Ask your local newspaper, radio and TV station for features, articles and editorial support on your activities in connection with the above issues. It's easier to get serious press coverage if you can provide a local angle to a global issue.
- Letters to the Editor are powerful tools. When they get printed, you reach thousands, even millions —

and at no cost. And send copies of the letters to your legislators. Even if they are not printed, they alert the editor that readers are interested in these issues.

- Contact your favorite columnist, reporter, or broadcaster, including action reporters and talk-show hosts. You could note that it's in the noblest tradition of the media to make people aware of injustice, to give the powerless an opportunity to have their interests considered.

### KEEP IN TOUCH

- We need to keep assessing our progress and what remains to be done. Please send us (Animal Rights International, Planetarium Station, Box 214, NYC 10024) copies of all replies you receive, so that we can keep track of what's happening. You may also want to send copies to: E. Molbegott, ASPCA, 441 E. 92nd St, NYC 10128; K. Savesky, MSPCA, 350 Huntington Ave, Boston, Mass 02130; C. Stevens, AWI, Box 3650, DC 20007; C. Mouras, API, Box 22505, Sacramento, CA 95822; M. Hamby, HSUS, 2100 L St, NW, DC 20037.

- Share your successful experiences with us. What have you tried? What has worked? How and why? ■

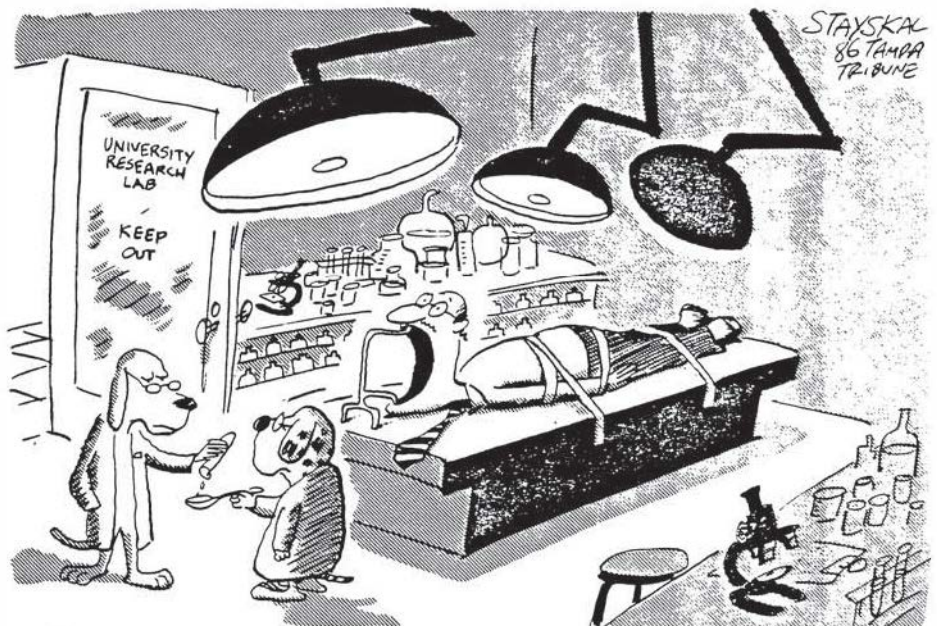
Short-term toxicity testing has been where most of the progress has occurred — particularly with regard to the Draize eye irritation test and the LD<sub>50</sub> (lethal dose that will kill 50% of the test population)....

Companies that a few years ago regarded research on alternatives as somewhat offbeat are now trumpeting their various initiatives and boasting of substantial reductions in animal use....

The classic LD<sub>50</sub> test has now been virtually eliminated in favor of tests using judiciously selected dosages on fewer animals....

At least a dozen in vitro alternatives to the Draize — ranging from cell cultures to whole rabbit eyes to testing substances on chick embryo membranes — are now under active investigation.

—"A pivotal year for lab animal welfare" by Constance Holden, *Science*, April 11, 1986.



DOCTORS FIDO AND SPOT PREPARE TO TEST A NEWLY DEVELOPED WORM MEDICINE FOR HARMFUL SIDE EFFECTS!

# PROMOTING ANIMAL RIGHTS AT THE COMMUNITY LEVEL

By Ann T. Koros

Animal Rights Kinship is a grassroots organization that also operates as a central clearing house and resource center for animal rights information. We respond to requests from groups and individuals from across the state and nation, and although ARK works directly with most of the large groups, it is independent of them. We have no membership dues, and anyone who is committed to helping animals can be a member.

Our main goal is to sensitize and educate the public on animal issues. We make presentations to schools and civic groups, participate in debates, speak at rallies and teach others to work in these areas. We attend meetings of both animal welfare groups and animal exploiters to keep up-to-date on new issues that need to be supported or opposed. We've toured local laboratories that use animals for research and argued for replacing animal tests with nonanimal alternatives. We also inform others as to what to look for when they visit laboratories in their areas and what kind of questions to ask experimenters about their research and the conditions the animals are kept in. Besides cooperating with animal rights groups and wildlife rescue organizations, ARK recently started working with Austin EARTH FIRST!, an activist environmental group, on problems relating to the welfare of Texas wildlife and wilderness.

Media work is critical — both in times of crisis and in relatively quiet periods. During crisis periods, we do many TV, radio and newspaper interviews. The media have been extremely helpful by presenting our side of issues. Last summer in Austin, we worked with local residents and Austin Wildlife Rescue to halt an officially sanctioned slaughter of a beaver colony. The plot was uncovered only hours before the killing was supposed

to occur. Excellent media coverage helped postpone the attack and kept public interest in the case high while we arranged meetings with officials. The beavers were shown to have been scapegoats to justify flooding caused by overdevelopment and under planning. The "shotgun solution" to the problem was averted by a small amount of excavating to aid drainage, and today the entire beaver colony is thriving. The increased public awareness that animals are not just objects to be "cleared" like weeds from areas was an important side benefit of the project. It is also very important to keep in touch with the media even when there is no particular crisis. Ask to appear on local radio talk shows to keep the general public informed.

ARK meetings are held regularly, and an Austin musicians/arts newspaper prints ARK announcements in their community services section. At ARK meetings we discuss current issues that affect animals in Texas and all over the world and what we can do about them. We mail meeting announcements to individuals in our area and send updates to interested parties who can't attend a particular meeting. Just because people can't attend meetings certainly doesn't mean that they aren't interested in animal rights. In the past year in Austin, some members who couldn't regularly attend meetings wrote articles in college newspapers and others arranged a very successful rock band concert to benefit a small local animal shelter. Members of ARK who are associated with the University of Texas at Austin are also forming an animal rights group on campus. They will be able to have meeting announcements listed in the student newspaper and have access to meeting rooms and display tables on campus.

By working with schools, environmental groups and other people in your areas, animal rights becomes

what it should be — an integral concern of the entire community. ■

*Ann T. Koros is a leader of successful grassroots animal rights campaigns in North Carolina and Texas.*

Animal researchers and animal rights activists describe a marked shift in the workaday laboratory. They say a sharper concern with the necessity of a test — what does it accomplish? — and more care to reduce the suffering in tested animals are becoming mainstream attitudes. . . .

Scientists said the new ideas for in vitro testing hold the promise of doing better science. Advances in cell biology and a better grasp of the chemistry of toxicology itself — such as how and why inflammation occurs — are intriguing researchers for their own sake.

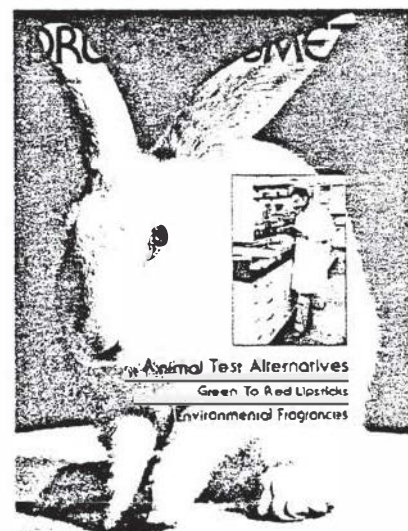
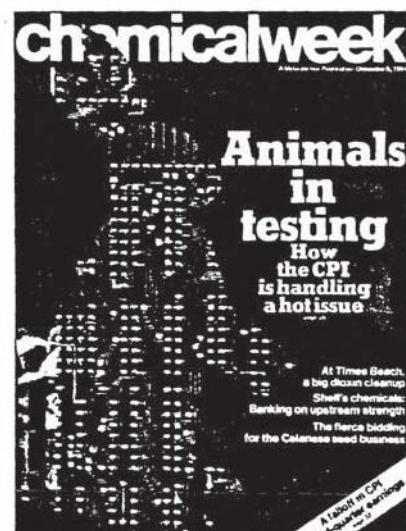
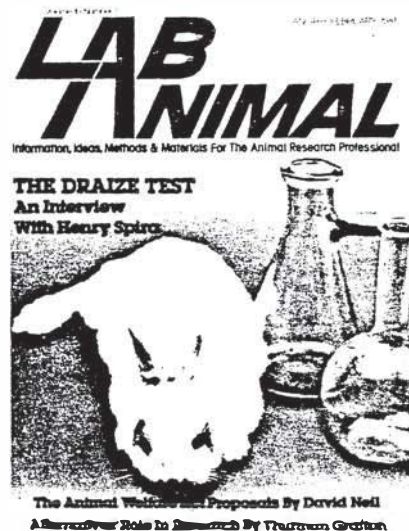
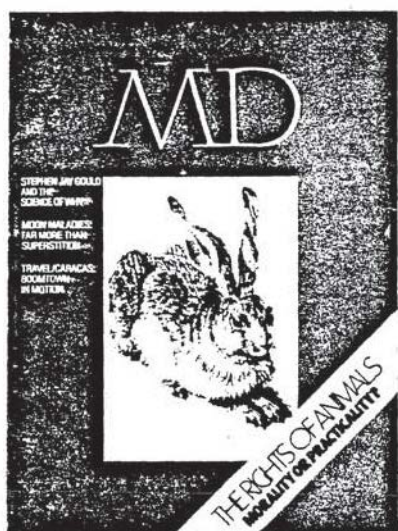
At Ohio State University, Professor Jerald Silverman works evenings and weekends toward a possible alternative to the Draize method, using a common protozoan.

He has been studying how dilutions of toxins added to a dish of protozoa, called *Tetrahymena thermophila*, affect their ability to swim. If 10% of the one-celled animals fail to move normally, that concentration is considered the highest tolerated dose.

Other scientists are studying how toxins affect cell membranes, chick embryos and human eye cells discarded during optical surgeries.

*"Lab animal alternatives get results" by Karen R. Long, Cleveland Plain Dealer, March 11, 1986.*





Nine cover stories spotlighting the increasing awareness that humane and innovative science can coincide.



# Animal Care Committees and Sunshine Laws

In October of 1985, Congress passed an amendment to the Animal Welfare Act (S. 1233) that made animal care and use committees mandatory at every research facility. These committees must inspect the research facilities, review all research that might cause pain to animals, train researchers in humane animal care and experimentation, and ensure that research and care at least meet federal standards. The act formalizes the move towards institutional review, which is already in existence at many research facilities.

However, as Holly Jensen, an animal rights activist in Gainesville, FL, noticed, the act is missing some teeth. "We hoped that, with the new law, the animal care committee at the University of Florida would no longer operate as a rubber stamp committee. However, they passed one proposal in which dogs would be nearly drowned to prove that the Heimlich maneuver [for choking victims] could not be used to resuscitate human drowning victims, and another in which cats would be hung for months by their hindquarters to study weightlessness." Both experiments lost their funding after the public protest organized by Jensen, and the uproar led the nearby community of Jacksonville to cut off all shipments of pound animals to the university.

Jensen credits her grass-root organization's success to two things—knowing how to mobilize public pressure, and acting before the research projects are actually funded.

"In 1979," she said, "the University of Florida group started to monitor the university's animal care committee. However, the meetings were closed to the public until we threatened to take them to court under Florida's Sunshine Law." Sunshine laws prevent government agencies or agencies funded with

government monies from closing most meetings and records to the public.

"Since then, we've attended every monthly animal care committee meeting. This committee has looked at research much more closely—the protocols are much better because of the review process."

However, some unsavory projects, such as the drowning dog and hanging cat experiments, still get past the committee. When that happens, Jensen says, her group brings the projects to public attention, and the rest is history. "I think it's getting much easier to make animal rights points. Audiences understand the messages and see the connections now. Sentiment is very, very strong for caring about other species."

Sitting in on the committee meetings gives her group another important edge. "There haven't

In a high-tech laboratory in New York City, a scientist inserts a small plastic rectangle honeycombed with 96 holes into a machine. *Click... click... click*, the machine reverberates as it analyzes mouse tissue inside each of the holes. Within minutes, the machine spits out a strip of paper that details how toxic chemicals have damaged the tissues, which were grown in a test tube.

Scientists at Rockefeller University are engaged in a search, but it is not to find a cure for cancer or some other dreaded disease. Instead, they are seeking to find new ways to do science itself, ways that would greatly reduce both the number and the suffering of laboratory animals.

The search for alternatives is being taken seriously by the scientific community.

been many people who stopped research as successfully as we have. But if other groups can get into the process early, they'll find that stopping projects is much easier. Once the researchers have the cash, it's much harder to get projects terminated."

*Note:* All 50 states now have sunshine laws, although some states' laws are stronger than others'. Copies of a 1984 SPJ,SDX survey of the nation's sunshine laws and this year's Freedom of Information survey are available from the Society of Professional Journalists, Sigma Delta Chi (SPJ, SDX), 53 West Jackson Blvd., Suite 731, Chicago, IL 60604. For more information on the laws in your state, contact your local chapter of the SPJ, SDX, or talk to a friendly newspaper reporter. For help with Freedom of Information requests, call the FOI Hotline, a service of the Reporters Committee for Freedom of the Press, SPJ, SDX, at 800/336-4243. ■

—S.L.F.

- At the University of Texas, Dr. James Walker has developed a computer model that can simulate the effect of drugs on dogs. This program, which medical students used instead of live animals, has saved the university \$18,000 over the last five years and saved the lives of about 240 dogs.
- At the Medical College of Pennsylvania, Dr. Joseph Leighton has developed a test in which the membrane of a chicken embryo replaces the Draize product-safety test as a way to determine if substances are harmful to the human eye.

—"Alternatives, Researchers seek new methods to reduce animal experiments" by Jim Detjen, *The Philadelphia Inquirer*, August 12, 1986.

# ALTERNATIVE TESTING JOINS THE SCIENTIFIC MAINSTREAM

By Susan Fowler

The catalyst is the animal rights movement. The motor is lower costs, and the excitement of better science. The result is a whole-hearted movement towards *in vitro* (test tube) systems.

Many interesting alternative tests have come out of Johns Hopkins University, Rockefeller University and other research centers during the last six years. The next step is to turn these trial systems into every-day ones through "validation": checking that the new tests give the same (or better) information about chemicals' effects on human health, at the same or a cheaper price.

The U.S. government, the chemical industry, and the commercial testing laboratories have all been making progress. A few examples:

- The two largest independent toxicology labs in the United States, Battelle Labs and Hazleton Labs, have set up alternative test validation studies.
- The Soap and Detergent Association has a Draize-alternative validation project.
- The National Toxicology Program of the Department of Health and Human Services is evaluating *in vitro* systems and has asked for proposals on alternatives development.
- The Congressional Office of Technology Assessment has found that *in vitro* tests are approximately one-tenth the cost of animal tests—\$50,000 for a battery of *in vitro* tests against \$500,000 for a traditional animal test.

## ALTERNATIVES CATAPULT BIOLOGY INTO FUTURE

The list is longer, but here is the big one: Last spring, the National Academy of Sciences (NAS) released a report entitled "Models for Biomedical Research." The report, funded by the National Institutes of Health (NIH), was supposed to advise the NIH on

how various mathematical and computer technologies and simpler animals (flatworms, insects etc.) could be used as alternatives to mammals in research. The committee fulfilled this obligation, but went much further.

As they looked through the data for their report, they found that "In every...level from molecules to ecosystems, common hardware, common programs, and common strategies are used to achieve diverse ends." For instance, the same chemical used as a mating signal in yeast has been found in mammals as a sex hormone. It is as if the same material is being picked up and reused over and over—for new purposes, perhaps, or in more sophisticated surroundings, but still following certain rules.

So far, biology, unlike physics, has lacked universal rules—principles that seem to hold from the molecular level all the way through the more complex organisms. The committee members, however, were able to see connections that no one else had noticed, simply because they had to make sense of such a variety of information.

The panel proposed, therefore,

In eye-irritant testing, says Pamela J. Danneman, the associate director of P&G's product-safety division, "it turns out that the best science also reduces suffering."

So federal agencies now sometimes see companies taking the same side as animal-protection advocates. In 1983, the Food and Drug Administration received some 2,000 letters asking it to clarify under what conditions researchers were required to perform the LD50 test. The agency then announced that it wouldn't routinely require LD50 testing.

"Companies begin to use fewer animals when testing new consumer products" by Richard Koenig, Wall Street Journal, May 19, 1986.

that the NIH help other researchers reproduce their experience, in effect, by organizing the available data in a way that would make it easier to recognize connections. They suggested that the NIH develop a computerized "matrix data base," which could be accessed from any number of disciplines. A data base that is designed to search for general laws and structures, they concluded, "will make general biology much more easily accessible to the biomedical scientist."

## FROM LAB BENCH TO MASS MARKET

When a group of concerned citizens starts any public campaign, they start with a goal and a hope. Their goal is to change some particular noxious behavior, but their hope is that the people who are forced to change their behavior also change their minds—that they'll find it was to their advantage to have changed. When this happens, the old ways become unthinkable and the new ones take on a life of their own—with consequences that the activists never thought of.

Clearly, the net result of the NAS study was unexpected, and revolutionary. A committee that was only expected to look into alternatives may instead change the face of biology.

But there is still the mundane task of commercially developing and validating the existing test alternatives. Here, the interest of the commercial labs is crucial.

"We feel that our work is complementary to the basic research going on at places such as Johns Hopkins and Rockefeller," says Thomas D. Sabourin of Battelle's Columbus Laboratories. "When a Johns Hopkins researcher finishes a research project, there still might not be a product. A big lab like Battelle, however, can take that research further and develop, evaluate and validate a product suitable for the market."



Sabourin was surprised that Battelle has been funding most of this research itself—usually contract labs wait for someone else to pay for a project. As Sabourin's experience shows, the big labs have thrown their weight behind alternative tests. However, there is still the problem of validation. In a 1984 molecular toxicology newsletter, David Brusick, vice president of Hazleton's Biologic Safety Evaluation Directorate, said he'd like to see some constructive recommendations which would move the validation idea off dead center. He hasn't changed his mind since then.

Says Brusick: "We've done all we can to convince people that the genetic toxicology tests that we've developed do actually work. But the argument doesn't take. The problem is, we need to define the criteria so that people who develop an alternative know when they have one. But who's going to set the criteria, and then, who's going to follow them?"

Brusick adds, "Some group is going to have to agree, by formal consensus, what these criteria are. If we have to try to match *in vitro* tests to animal tests point by point, then the project is doomed to fail. We know the animal tests themselves don't predict human effects perfectly. We know they don't give consistent, accurate results. But they're what everyone uses simply because they're recognized by regulatory agencies."

He sees the expansion of publications on *in vitro* toxicology as a step towards developing a consensus, mentioning three new journals in particular—*Comments on Toxicology* at Johns Hopkins, *Molecular Toxicology* from Hemisphere Publications, and *Toxicology in Vitro* from Pergamon Press. "Over the next year, says Brusick, "there will be a lot of exposure [of validation ideas] because of these publications."

## BREAKING THROUGH THE INERTIA

Researchers are intrigued by the possibilities that alternatives research has opened up, and it is probably safe to say that a consensus on validation is forming. However, the amount of time it takes—five years, 10 years, or 20 years—may depend on public pressure.

Public pressure has, of course, been effective in the past "Animal rights were the catalyst on this issue," Sabourin says. "Originally, the Cosmetic, Toiletry and Fragrance Association funded the start-up of the Johns Hopkins Center for Alternatives simply to get the animal rights activists off their backs. But when renewal time came around, they saw the cost benefit. The scientific community's increased acceptance of alternative test systems has opened many new doors for funding." ■

Susan L. Fowler is a former editor of *Lab Animal*, a biomedical research trade publication.

# The Media Passes on the Message

As you can see, animal rights issues have hit the big-time media. but what about the research community? Are researchers getting the message as well?

The answer is yes, because of the extensive coverage by science newsletters and trade journals. These publications have been putting animal alternative ideas and techniques into researchers' hands.

For instance, the *Blue Sheet*, a newsletter for pharmaceutical industry, and the *Rose Sheet*, for the toiletries, fragrances and skin care industries, cover animal issues religiously. Excellent overview articles have appeared in:

- *Chemical Week*—"Animals in

Testing, How the CPI is Handling a Hot Issue," Dec. 5, 1984,

- *Drug and Cosmetic Industry*—"Animal Test Alternatives: Rockefeller, Johns Hopkins Hone in on Separate Objectives," April, 1985,
- *New Scientist*—particularly "Redundancy for the Laboratory Guinea Pig," May 3, 1984, and "When to Experiment on Animals," Feb. 26, 1986,
- *Chemical and Engineering News*—"Alternative Methods Could Cut Animal Use in Toxicity Tests," Oct. 31, 1983,
- *MD*—"The Rights of Animals, Morality or Practicality?" October, 1981.
- and *Lab Animal*—especially "Prevention of Cage-Associated Stress," and "Computer Simulation for Bio-

medical Research," both in the Nov./Dec. 1985 issue.

But most telling is the general awareness of animal rights on the part of science/trade writers and editors. Even a *New Scientist* article that tries to make a case for breeding chimpanzees in captivity (so that they will continue to be available for research), ends with this discussion: "Chimpanzees are so close to ourselves that when we ask them to substitute for us we are, genetically, making a sibling species stand in our stead. At that level, being bred in captivity and being used in minimal quantities does not count for very much." (The article is by Jeremy Cherfas in the March 27, 1986, issue.) Five years ago, any discussion about ethics would be controversial. Now, that discussion is required. ■

# COMPUTERS AS ALTERNATIVES

## PLANNING, CUTS ANIMAL USE.

Computers originally designed as aircraft, spacecraft and wargame simulators are being used at Duke University to study complex physiological systems. Dr. Mailen Kootsey, director of the project, expects the system to help reduce animal use: "You have to think very carefully and in very specific terms when you're using a computer system. Although we'll still need to check the simulations against animal data, the computer makes planning very important. Any time you have more planning, animal use goes down." Forty projects are already underway, and the list of users is growing, he says, as more people find out about the system. His group has also developed a general-purpose, easy-to-use simulation program, called SCoP, for both microcomputers and larger machines. For more information, write to the National Biomedical Simulation Resource, Box 3709, Duke University Medical Center, Durham, NC 27710.

## COMPUTERS PROVIDE BETTER ANSWERS

The National Institutes of Health sponsor a number of computerized biomedical simulations that, although not billed as "animal alternatives," answer the same questions as the LD50 and other traditional human-safety tests—but with much greater precision.

At the University of Southern California, for example, Dr. Roger Jelliffe has a computer system that researchers use to study drug effects. "We're bringing process-control engineering to the field of drug therapy," Jelliffe says. "In other

words, we do here what the Defense Department does for missiles systems—find out where drugs tend to be distributed in a patient's body, what the effects are on various tissues and organs, and the relationship between concentration and effect." These are the kinds of information that the LD50 test has been used for, he says, but adds: "We do better than the LD50 because we can describe uncertainties—errors in dose preparation, the effects of timing and body weight, and so on. But rather than classifying effects as black or white, all or none [as the LD50 does], we can look at the quality and the quantity of the drug's effect."

## THE CONNECTION BETWEEN SHAPE AND HAZARD

Other researchers are refining "structure-toxicity relationship" programs. In structure-toxicity projects, scientists study the size and shape of chemical molecules for clues to hazards. They have noticed, for instance, that a certain poison may mimic the shape of a natural substance and hook into the natural chemical's receptor in the body, leaving no room for the natural chemical. Lead, for example, takes the place of oxygen atoms in blood cells and, in effect, smothers living tissues. With a computerized system that can simply show what the molecule looks like, researchers "can screen out certain chemicals before they are ever tested in animals," says Tony Hopfinger, director of medicinal chemistry at G.D. Searle & Company.

## CORPORATIONS SHARE RESEARCH

Industry leaders now often use their own or industry files of chemical

and product information to avoid retesting similar formulas. Dow Chemical, for example, says their researchers use in-house data to design pharmaceutical studies, rather than start each one from scratch with a new batch of animals. Dow also conducts joint studies with other companies on chemicals of interest to all of them—the companies pool resources and conduct a single study instead of individual ones.

Chemical and cosmetic companies are also tying into the National Library of Medicine's computerized "Specialized Bibliography on Laboratory Animal Welfare" and TOX-TIPS (Toxicology Testing in Progress) network. Plus, the library has added a new index term, "animal testing alternatives," to its *Index Medicus* listing. (Adding new indexing terms may seem a small victory, but without them, it is almost impossible to search large, computerized data bases for animal alternatives.)

## RESEARCH RAT OF THE FUTURE

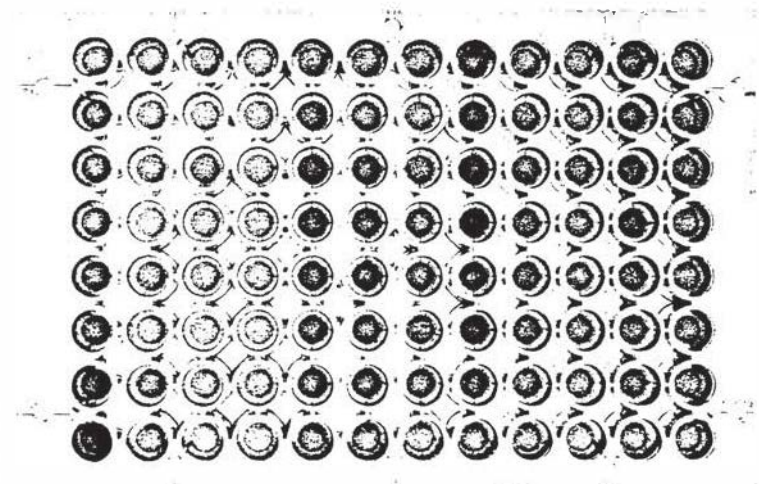
Los Alamos researchers have developed a computerized system that they believe may be the "research rat of the future." The program, called "HUMTRN," holds up to 10 million pieces of information about nearly any substance that can be taken into a human body. HUMTRN is programmed to eat, breathe, work, perspire, eliminate waste, grow, develop sexually, age and die. "It allows experimentation without manipulation of the real world," Prof. John Spencer, one of the researchers who uses the system, told the *New York Times*. "This is the cutting edge of modeling technology."

—Susan Fowler



## Non-violent alternatives,—the emerging new science.

*Many new programs which seek to eliminate the use of lab animals may also promote more relevant, rapid and economical methods for evaluating the safety of products.*



While the brutal Draize rabbit eye irritancy test (above left) is slowly being phased out, new techniques such as the "chorioallantoic membrane" (CAM) test are being developed with the promise of more elegant science. In a procedure developed by Colgate-Palmolive and Dr. J. Leighton (top right) a test substance applied to the CAM is evaluated after three days for toxic reaction.

In another procedure, varying amounts of the test substance are applied to a battery of 96 "wells" containing dyed cells. Automated equipment in the Rockefeller University lab of Drs. E. Borenfreund and C. Shopsis assesses toxicity by measuring the lightness (more toxic) or darkness (fewer cells killed) of each well.

ANIMAL RIGHTS INTL.  
P.O. BOX 214  
NEW YORK, NY 10024