1	COMMONWEALTH OF PENNSYLVANIA HOUSE OF REPRESENTATIVES
2	COMMITTEE ON JUDICIARY
3	In re: HB 873 Animal Lab Testing
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6	Stenographic report of hearing held in Room 8E, East Wing, Main Capitol
7	Building, Harrisburg, Pennsylvanıa
8	Thursday, May 25, 1989 10:00 a.m.
9	
10	HON. THOMAS R. CALTAGIRONE, CHAIRMAN Hon. Kevin Blaum, Subcommittee Chairman on Crime and Corrections
11	Hon. Gerard Kosinski, Subcommittee Chairman on Courts
12	MEMBERS OF COMMITTEE ON JUDICIARY
13	Hon. Michael Bortner Hon. Nicholas B. Moehlmann Hon. Lois S. Hagarty Hon. Jeffrey Piccola
14	Hon. Richard Hayden Hon. Robert D. Reber Hon. David W. Heckler Hon. Karen A. Ritter
15	Hon. Paul McHale Hon. Michael R. Veon Hon. Christopher K. McNally
16	Also Present:
17	
18	Hon. Thomas J. Murphy, Jr. William Andring, Majority Counsel David Krantz, Majority Executive Director
19	Mary Woolley, Minority Counsel Mary Beth Marschik, Minority Research Analyst
20	Katherine Manucci, Committee Staff
21	Reported by:
22	Ann-Marie P. Sweeney, Reporter
23	
24	ANN-MARIE P. SWEENEY 536 Orrs Bridge Road
25	Camp Hill, PA 17011

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1	CHAIRMAN CALTAGIRONE: I'd like to open up
2	these proceedings. We're here to take testimony on the
3	animal rights legislation, House Bill 873, a public
4	hearing held by the House Judiciary Committee. I'm
5	Chairman Tom Caltagirone from Berks County. I'd like the
6	other members' presence so noted from the record. It we'd
7	start from my left with staff, and staff and members can
8	introduce themselves as we go around.
9	MS. MARSCHIK: Mary Beth Marschik, minority
10	Research Analyst.
11	REPRESENTATIVE PICCOLA: Representative Jeff
12	Piccola from Dauphin County.
13	REPRESENTATIVE REBER: Representative Bob
14	Reber from Montgomery County.
15	MR. ANDRING: Bill Andring, Democratic
16	Counsel for the committee.
17	REPRESENTATIVE MOEHLMANN: Representative
18	Nick Moehlmann, Lebanon County, minority chairman.
19	REPRESENTATIVE HAYDEN: Representative
20	Richard Hayden from Philadelphia County.
21	REPRESENTATIVE McNALLY: Representative
22	Chris McNally from Allegheny County.
23	REPRESENTATIVE KOSINSKI: Representative
24	Jerry Kosinski from Philadelphia County.
25	MS. MANUCCI: Katherine Manucci, Secretary

to the committee.

MR. KRANTZ: David Krantz, Executive Director of the committee.

With just a couple of things. I've been asked to mention that we are not allowed to bring any food, drink or any smoking in this room, so I'd appreciate it if everybody would abide by those rules. I'd also like to just say that everybody will be afforded an opportunity to testify that's on the agenda. I would hope that everybody would conduct themselves in a decent, orderly manner and that we get on with the business of what we're here for, and that's gathering information for the edification and benefit of the members of this committee so that we can discuss this issue in an intelligent manner and we can decide exactly what we have to do.

We'll start off with -- Representative

Murphy is going to make a statement, but prior to that,

Chief Counsel Bill Andring would like to enter several documents for the record that have been sent to our office.

MR. ANDRING: Just for the record, we've received a letter from J. W. Pedigrue, M.D., Director of the Neurophysics Laboratory of the Psychiatric Institute. We've been provided a copy of the Journal of Toxicology,

Volume 8, No. 1, a special issue on a government industry workshop on progress for its non-animal alternatives for the Draize test. And the chairman has also communicated with a number of Federal government agencies, including the Consumer Products Safety Commission and Environmental Protection Agency, asking them for their position on the bill under consideration. When those are received, they'll be distributed to the committee members and made a part of the record.

chairman caltagirone: And we do have several pieces of correspondence both pro and con on the legislation that is being submitted for the record, and the court reporter does have that with her. Copies to be distributed then at a later date for all the members.

(See appendix for copies of exhibits.)

CHAIRMAN CALTAGIRONE: At this time, I'd like to recognize Representative Thomas J. Murphy, who is the prime sponsor of House Bill 873.

REPRESENTATIVE MURPHY: Thank you, Mr. Chairman. New microphones. I'll have to get used to them.

Let me just say as a beginning that many of you have received letters, as I have received, from a variety of prestigious institutions and doctors from around the State in opposition to this bill, and as I read

those letters I realized that many of them really did not read the legislation and I think were responding to information provided to them in the worst-case scenario. If you read the legislation, I think you will see that much of what they say is factually untrue and is in reality not impacted by the legislation at all.

I have reintroduced House Bill 873 because it addresses some of the concerns I and tens of thousands of fellow Pennsylvanians have regarding the treatment of laboratory animals undergoing experimentation and use for product testing. House Bill 873 does not restrict medical iesearch. The measure addresses those areas where basic animal protection in laboratories is either weak or nonexistent. House Bill 873 deals with duplicate or redundant research, cosmetic and commercial testing, and student rights.

It also, for the first time, places research laboratories under the search warrant provisions of Pennsylvania law, search warrant provisions which every other person, institution, and corporation in Pennsylvania falls under. There are -- you each will receive a tape of two Pennsylvania institutions that have been charged with a variety of violations, one shut down, the University of Pennsylvania Head Injury Laboratory. In each case, there were repeated efforts to get public law enforcement

officials to investigate the alleged abuses in these racilities without success because they did not have the ability to use search warrant provisions to go in and investigate, so they did not have the jurisdiction they needed. That's the reason for placing every institution in Pennsylvania under the search warrant provisions.

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Let me remind you again that this measure deals with unnecessary and duplicative research and seeks to create checks and balances in the research industry. Some will argue that any regulation of animal research could have adverse effects on certain businesses. I do not believe that commerce and industry have to rely on animal killing and suffering to test their products. Just like arguing that business can't survive without child labor or the 12-hour day. Hundreds of companies produce products without resorting to animal testing. Most recently, Avon and Mary Kay Cosmetics, two very large cosmetic companies, have announced that they no longer will test their products on animals, that they have developed other alternatives. This legislation continues -- would continue to push industries that are not as progressive as those two to develop those alternatives.

The simple fact is that the research industry has a vested interest in the status quo, and inertia makes all of us unwilling to change direction.

House Bill 873 helps to make that change.

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The most controversial element of this bill is to call for a ban on eye irritancy and acute toxicity testing. These are two particularly painful tests used for the development of household products and cosmetics, and, may I add, are not involved in direct research, medical research, or drug research, for that matter.

Despite claims to the contrary, the U.S. Food and Drug Administration does not require tests which blind or kill animals. There are a variety of personal care or cosmetic products which are marketed without animal tests. It is unacceptable that we inflict pain and suffering to test lipstick and perfume when it is unnecessary.

House Bill 873 also addresses the inadequacies and lack of timeliness in respect to Federal inspections of labs. Some labs benefit from infrequent inspections, some labs do not have to register at all. Proposed Federal regulations call for even fewer inspections.

het me add that House Bill 873 also protects the right of students who, for personal or religious reasons, refuse to experiment on living subjects. Great Britain did away with live animal experimentation in medical school 100 years ago. It is not necessary to force students to inflict pain or suffering in order to

learn.

My bill, ladies and gentlemen, is a modest proposal. It is also almost like a sunshine bill for thousands of creatures who will be subjected to pain, and we have compromised to get the measure in its present form. It's a good start.

I urge all of you to support this

legislation, but more importantly, I urge all of you to

listen closely to the testimony today. We've had one

other prior hearing last year, some of you might have

attended that. From that hearing I think a lot of people

had their eyes opened to this issue. I ask you to put

aside the ghosts that will be raised by some people in the

research community - ghosts that do not exist. I ask you

to listen to the testimony, both pro and con, and I think

you will come to the conclusion that this bill is a modest

step forward in creating the stewardship in Pennsylvania

over all living creatures that the Commonwealth ought to

have.

Thank you. Are there any questions?

(Whereupon, Representative Moehlmann assumed the Chair.)

ACTING CHAIRMAN MOEHLMANN: Thank you, Representative Murphy.

Are there any questions?

REPRESENTATIVE KOSINSKI: Mr. Chairman, I'm sorry, no question. I'd like to make a motion, if in order, to invite Representative Murphy to sit with us.

REPRESENTATIVE McNALLY: I thought Nick was going to ask.

ACTING CHAIRMAN MOEHLMANN: Do you have a question?

REPRESENTATIVE MCNALLY: Yes, I did.

BY REPRESENTATIVE MCNALLY: (Of Rep. Murphy)

Q. Mr. Murphy, as a matter of fact, one of the issues most commonly raised in the correspondence that I have received is that there is a great deal of, or at least there is some Federal regulation of research laboratories. Now, your bill would require institutional care committees to be set up in each research facility and would establish other regulations through the, I believe, the Department of Agriculture. I think one argument that is being made by the research community is that if Pennsylvania adopts more rigorous standards, it would make us, from a research and economic standpoint, less competitive with surrounding States which would be following less rigorous or what you would say then are less rigorous standards at the Federal level.

First of all, you know, would you agree that we would be at some competitive disadvantage? And this

would be particularly important since some of us would like to rely on technology and the research and scientific community as an engine for economic development.

- A. First of all, Chris, if you read page 2 of the bill you will see that it says that "License required," and it says, "...for that purpose by the Secretary of Agriculture, or by the Federal Laboratory Animal Welfare Act." It doesn't say "and," it says "or". So research facilities that are already licensed by the Federal government do not have to also go get a license from the Secretary of Agriculture.
- Q. If you read page 3 is says that "Each research facility shall form an Institutional Animal Care Committee."
- A. They are required to do that already under the Federal law, so that is not duplicative.
- Q. So that you -- in fact, you don't think that there is any difference between this bill and Federal regulations?
- A. In -- there are some additional differences, particularly the Federal legislation does not prohibit the Draize or the L.D. 50 test. We would prohibit that. That is not a research test, that is a product test. It's product testing. It also grants rights to students. You might remember a year or so ago a high school student in

California came close to getting expelled because she refused to do vivisection on a frog. A few years ago in Pennsylvania, students at the veterinarian school at the University of Pennsylvania were threatened with expulsion because they would not perform vivisection or routine classroom procedures on dogs. Alternatives were ultimately developed so that they could graduate, and they both are veterinarians today. So that the bill does take a step further, but I do not believe there's any cedundancy in the bill at all. Federal government requires an animal -- institutional animal committee. There is no reason why the institutions can't have one animal care committee and suit the State and Federal responsibility.

- Q. But the fundamental argument here is that if Pennsylvania's standards are more rigorous than those of surrounding States, we have some disadvantage competitively.
 - A. What is the disadvantage?

Q. Well, first of all, that if you want to do research or engage in some scientific work that involves or in which you may want to involve animal testing, you'd be better off to go to New York or New Jersey or Maryland or Ohio or West Virginia or some other State rather than come to Pennsylvania where the restrictions and

regulations are more rigorous.

- A. In regard to the h.D. 50 test and the Draize test, you're probably correct, Chris.
 - Q. Okay.
- A. In prohibiting those tests, that will be a higher standard than other States will have. Other States might be able to use those -- companies might be able to use those tests in other States, and in fact it might be cheaper than the high tech alternative. It is my belief in the long run it will not be cheaper for them to use animals.

REPRESENTATIVE KOSINSKI: Just a comment, Representative McNally, sir.

In comment to you, Representative McNally, T think that one part of high tech and one part of advancing technology in the States is coming up with alternates to animal testing, specifically with the L.D. 50 and the Draize eye test. And we have some great research institutes in this State, and it seems to me they are being far outstripped by places like Johns Hopkins in Maryland with the non-cruel ways to conduct these two specific tests, which is one of the reasons Representative Murphy's bill is a catalyst towards such high tech research in these areas.

REPRESENTATIVE MURPHY: That's correct, and

in fact we have funded, through some State programs, efforts to find alternatives to the use of animals in research. So, Chris, if you're interested in Pennsylvania being the high tech engine of the country, then you should be for this bill because it pushes alternatives.

REPRESENTATIVE McNALLY: Well, I think a more appropriate method would simply provide financial incentives for advances in technology rather than putting regulations and burdens on--

REPRESENTATIVE MURPHY: I think we do both the carrot and the stick. We provide those financial incentives to encourage people to develop those alternatives also.

REPRESENTATIVE McNALLY: The reason I raise the question is that I see a contradiction that this Federal/State regulation problem doesn't hold water with respect to animal welfare, but on fair labor standards, and specifically the minimum wage, that was the argument made for the working poor, that we shouldn't have a higher State standard because that puts us at a disadvantage.

(Whereupon, Chairman Caltagirone resumed the Chair.)

CHAIRMAN CALTAGIRONE: Representative Hayden.

BY REPRESENTATIVE HAYDEN: (Of Rep. Murphy)

- Q. Representative Murphy, you mentioned the one lab at the University of Pennsylvania, and I think the other major investigation was at the Biosearch Laboratories?
 - A. Yes.

- Q. Can you tell me, I never found out what happened as a result of those investigations. The Inquirer reports were almost a year ago. Can you tell me what enforcement action, if any, was taken against Biosearch?
- A. The University of Pennsylvania Head Injury Laboratory was ultimately shut down by the Federal Government.
 - Q. Yeah, I'm asking--
- A. I think Blosearch is still being investigated by the Philadelphia district attorney. There are, from what I understand, over 100 violations of Federal animal cruelty laws alleged, and it's being investigated. I do not believe that any charges have been brought forth yet.
- Q. So then as far as you know, it hasn't been resolved?
 - A. No, it's not been resolved.
- Q. The other question I have, and this is picking up on Representative McNally's point about the

attempt to impose an additional State standard over and above the Federal standard. I have -- unlike some of the people, I got some letters and it appeared to me, you're right, there are some people that didn't read the bill, and I had a chance to read the bill and I looked at your definition of research facility, I compared it to the Federal Register's definition of research facility, those laboratories and those research facilities which are required to be licensed under the Federal act, and the research facility definition which is in the proposed rules of the Federal Register on March 15, 1989, proposed very broad definition of what a research facility entails, what would qualify as a research facility. But it also said that the administrator "may exempt by regulation any such school, institution, organization, or person that does not use or intend to use live dogs or cats, except those schools, institutions, organizations or persons which use substantial numbers," and then it talks about live animals, and that the primary function is for biomedical research or testing. Then those particular research facilities may not be exempted. But what it does is it permits the administrator at the Federal level to say, okay, there are certain institutions, primarily schools, I would imagine.

A. Right.

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Q. And then he publishes a list of those schools which would be exempt. As I read your definition of research facility in this bill, particularly when you make specific reference to on page 5 of the bill "elementary, secondary or postsecondary school that uses or intends to use live animals in research tests or experiments," it appears that what this bill contemplates to do is to, despite the fact that at the Federal level they saw some merit to looking at schools and whatever--

- A. Right.
- Q. --this bill then proposes to incorporate every potential elementary school, every potential laboratory, and every potential use of a live animal?
- A. That's correct. It's an either/or. Either you register at the Federal level or you will register at the State level, but at some place there will be together, between the two, there would be complete registration of all facilities performing research.
- Q. The other point, just my last question to you, Representative, is on the issue of -- you speak about a license requirement in the animal research facility, Section 5511.1, and you just mentioned either/or. It appears that what you're attempting to do is that if you have a license under the Federal Laboratory Animal Welfare Act, that you are still going to be subjected to separate

1	State regulations under subsection (b). Is that what you
2	contemplate? Even though you're licensed under the
3	Federal government, you won't need a separate State
4	license or requirement but you will have to adhere to
5	State license and regulation?
6	A. Yes.
7	Q. Okay, thank you.
8	REPRESENTATIVE HAYDEN: Thank you, Mr.
9	Chairman.
10	CHAIRMAN CALTAGIRONE: Thank you,
11	Representative Murphy.
12	I'd like to note for the record that
13	Representatives Hagarty, Blaum, Ritter, Heckler, Veon and
14	Chief Counsel for the minority, Mary Woolley, is also
15	present with us.
16	I'll go to the next witness, Dr. Fredericka
17	Heller.
18	REPRESENTATIVE KOSINSKI: Could I make a
19	motion, Mr. Chairman, to invite Representative Murphy to
20	sit with us today?
21	CHAIRMAN CALTAGIRONE: Certainly. If he
22	would care to come up, he is welcome.
23	Doctor.
24	DR. HELLER: I'd like to thank the members

of the House Committee on Judiciary for allowing me to

speak today in support of House Bill 873. My thanks also to Representative Murphy for sponsoring this legislation.

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I am a physician with a private practice in obstetrics and gynecology in Reading, Pennsylvania. As a medical professional, I am concerned that there be legitimate and sufficient regulations on the scientific community to insure that the sacrifice of laboratory animals is professionally defensible and humanely conducted. Section 5511(a) of this bill provides the State with the authority to license and monitor animal laboratory facilities, and to enforce humane standards of care in these laboratories. While some researchers resent any increase in legislation and regulation, the reality, to my mind, is that existing laws do little to protect laboratory animals. Many species are exempted from the regulations for the Animal Welfare Act. Enforcement of minimal animal care codes is inadequate, partly because the Department of Agriculture's inspection division is underfunded and understaffed to control the large quantities of laboratories and research facilities that we're talking about.

As we mentioned earlier this morning, shocking abuses of animals have been exposed at institutions in Pennsylvania and across the nation. The State has both the right and the obligation to monitor and

regulate the treatment of laboratory animals so that future tragic and embarrassing cases, like the highly publicized animal abuse at the University of Pennsylvania's Head Injury Laboratory and the Bioresearch Cosmetic Testing Facility, can be avoided. I might add here that I am a graduate of the University of Pennsylvania School of Medicine, extremely proud of my alma mater, and very embarrassed about what happened there. It would not have happened if this bill had been enacted prior to that time.

As a consumer and mother of a 7-month-old, I am concerned about the safety of cosmetics and household products. As an obstetrician, needless to say, I don't have to tell you about malpractice and giving pregnant women medications which might cause malformations in a fetus. I know that animal tests can never assure that a product will be safe for human use because animals differ so significantly from humans. I might refer here to the famous thalidomide case, of which I'm sure you're all familiar back in the '50's where thalidomide had been tested on animals, it was given to humans who were pregnant, and I believe some of the local public education channels have recently done very exhaustive research on what happened to the pregnancies that were involved. These children had something called phocomelia, where

their limbs did not develop. Many of them died. Animals were used to test that medication. It's one of many that can be referred to. It did not transfer to humans, that information.

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Because of these differences, animal tests are of little or no use to emergency physicians in the management of cases of accidental exposures and poisonings. Instead, doctors rely on case reports, clinical experience, and experimental data from clinical trials in humans. And we joke about, did you test it in a rat? What happened to the rat? What happened to the Because we all know, it makes no difference what happened in those animals. What matters is when we give it to a human and what we see after the human ingests it or comes in contact with the product. And that's what we all pay attention to. As an obstetrician, obviously I won't give a drug to a pregnant woman that's killed 30 rats, but on the other hand, I certainly won't give a drug to a pregnant woman that did not kill 30 rats but caused a major malformation in children of women given the drug who were carrying a pregnancy. So you really cannot, and we don't as physicians, use that information in our clinical activities. And I think you can ask any physician that and they'll give you that answer.

One need only look at the shelves in a local

grocery or pharmacy to know that there are hundreds of products on the shelves and in the market which cause irritation and damage if they're splashed in one's eye, exposed to the skin, or swallowed. Clearly, the animal tests haven't kept those products off the market. They're still there. We know how to deal with them, for the most part, if they are accidentally swallowed, et cetera. Irritancy and acute toxicity tests on animals have little relevance to human experience. Frankly, I don't feel that they are of much clinical value and they are a senseless waste of animal lives.

I think it's time to reform our cruel and archaic consumer product testing. Remember, it was developed in the '40's. I hope we've advanced beyond the '40's.

To go on to another section of the bill, the right to exercise one's religious or moral convictions I feel is a basic tenet of the America political system, yet some students who have declined, for ethical reasons, to participate in animal experimentation or training exercises have been harassed. I, myself, as a student at the University of Pennsylvania, as I mentioned, in medical school was exposed to animal experiments for my educational benefit. I objected to them then, I object to them now, and I feel that they need to come under closer

scrutiny. Fiorida and California have enacted legislation to protect a student's right not to participate in animal experimentation, and Pennsylvania should follow their lead by enacting Section 5511.1(e) of this bill.

Thank you again very much for the opportunity to testify. I urge that you all vote in favor for this bill. I don't feel it's going to be an economic hindrance. I think you're going to find that consumers will support the idea of humane testing and eliminating useless testing, such as the Draize testing, which we really don't pay much attention to.

One of my patients this morning, incidentally, as I went around to see her, she had a lovely baby boy last night, said to me, "Where are you going?" And I said, "I have to leave for Harrisburg. It's a long drive and I can't stay and talk very long," and I explained to her what I was coming out to do. She said, "I won't use products that have been tested on animals using the Draize test, and I would prefer to buy a product which has been tested in either animals, if necessary, done in a humane fashion, or not use useless and senseless tests." The public, the general public, is very much aware of that, and I strongly feel that is not a damage to consumer buying. I think that's a benefit that we look at it and treat it sensibly.

1 Thank you very much.

here.

CHAIRMAN CALTAGIRONE: Doctor, we have some questions yet.

We had a little bit of a problem and that's why I was distracted here for a second.

Doctor, I apologize.

DR. HELLER: I'm sorry. You upset my son.
CHAIRMAN CALTAGIRONE: You can bring him up

Representative Hayden.

BY REPRESENTATIVE HAYDEN: (Of Dr. Heller)

Q. Thank you for your testimony, Doctor.

In response to your point that animal tests are of little or no use to emergency physicians in the management of cases of accidental exposures and poisonings, I received a letter yesterday from a Dr. Anthony R. Temple, who is a member of the Board of Directors of the Delaware Valley Regional Poison Control Center. He is a pediatrician and a medical toxicologist. It appears from his CV here that he's had extensive practice in the field of poison control issue, and he shares your concern that there are some tests that are, at least on the surface, perhaps to be unnecessary or perhaps to be inhumane on balance as to what the actual value and merit of those tests are when we compare to what the

utility is in the scientific community. But he does conclude that "unfortunately, reliable evaluation from the acute toxicity of cosmetics and household products still requires some animal testing," and he says he "knows of no reliable way to evaluate the acute toxicity of cosmetic and household products without some use of animal test results."

And then he mentions here your point about the lack of correlation between animal ingestion or animal use with respect to the human population. He says that, he talked about "most exposures to household products occur with children who are less than 6 years of age, while the products are being used. Seventy-five percent of the potential incidents happen while the products are in use." And he says, "Fortunately, most exposures at the present time are of minor or no consequences. The fact that these incidents are rarely life-threatening is not an accident...as a result of careful medical scrutiny, the nature of risk of exposures to the product and the fact that careful, considered animal testing is being conducted by the consumer products industry today."

And then he goes on to cite the American Association of Poison Control Center position, an act of March 11, 1988, which "opposes legislation that would limit the humane use of animals to provide acute or

chronic toxicity data until such time as reliable non-animal alternatives exist to provide such data."

But the reason I read this, I think it makes both your point and the point of others in the community which is that we should strive to achieve alternative tests, but at least from the point of those -- of some practitioners in the field, we're not at that point yet scientifically--

A. And I don't disagree with that. I would say that that physician and myself are very close. I would suspect that if we sat down and talked, we'd agree. I don't think that no animal testing is the answer, but I think that there are certain tests which are totally useless, and most of us would agree on it; that there may well be over testing, there may well be substitutes. And I think we need to look for this. And really, I agree with everything you just read there from that physician. I don't disagree with it.

Q. Thank you, Doctor.

CHAIRMAN CALTAGIRONE: Jerry

BY REPRESENTATIVE KOSINSKI: (Of Dr. Heller)

Q. First of all, I just want to point out, and we keep repeating this, that the focus of the hearing today is the Draize test and the L.D. 50. Could you give us any specifics on those, Doctor?

- 1 Α. Specifics. The Draize test, for example, is 2 done on rabbit eyes and I believe also--3 But the medical benefits or the benefits as 0. such? 4 5 Α. Well, for example, in the Draize -- I'm sorry, I won't be able to give you product names because 6 7 I'm not a researcher, but the Draize test itself has been 8 used on some animals and found to not cause a problem in 9 the rabbit and then found to cause a problem in a human, 10 so it has -- I'm sorry I can't give you product names, but 11 it certainly has been shown that that is true. It's not a very good test scientifically. And again, I don't perform 12 13 this test but, and never would, but it's the kind of thing where one -- six animals are used and if two show a 14 15 response, therefore it's a positive. If only one shows a 16 response, it's not a positive. Well, that's not really 17 very good scientific method, and I think any researcher
 - Doctor, did you come here of your own free Q. will today? You're not getting paid by any organization?
 - Absolutely not. I had to leave my private practice to do so.
 - Q. Thank you.

would tell you that.

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CHAIRMAN CALTAGIRONE: Chris.

BY REPRESENTATIVE McNALLY: (Of Dr. Heller)

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0. Dr. Heller, I'd like to call your attention to a magazine that my wife and I subscribe to, it's Discover magazine, it's a popular science type of magazine, and in this month's issue there was one particular article, a brief note about a study done by a group at McMaster University in Ontario. And if I can briefly describe the experiment, it was based on the classic Pavlov's dogs experiment. "The study, a joint effort by psychologists and immunologists, used Pavlovian techniques to manipulate the immune systems of rats. Pavlov had trained his dog to associate food with the sound of a ringing bell. The McMaster researchers trained rats to associate injections of an allergen with a humming fan and flashing strobe lights. On three occasions, two groups of rats were given an allergy-provoking shot in conjunction with this disco treatment, but on the final day, only one group was injected with the allergy-causing substance, although both were exposed to the noise and flashing lights. Remarkably, both groups had an allergic response. Blood tests confirmed that rats in both groups had high levels of an enzyme that is released when the immune system triggers an allergic attack. It is the explosive release of such enzymes and other chemicals themselves the symptoms of an allergy - swelling, inflammation, and excess mucous."

Now, I think in your testimony you describe that this bill would prevent inhumane treatment of animals that are being tested. Now, under this bill, could a person on the institutional care committee, construing the statutes and regulations both Federal and State, conclude that the injection of rats with an allergy-provoking substance is inhumane and that in fact if someone in Pennsylvania wanted to repeat the experiments done in Ontario, that it's redundant?

A. All those things certainly could be referred to. However, I think that many physicians know that allergy responses can be provoked by emotional upset. If you, Pavlovian-wise, train an animal to know that they're going to break out with hives when they see the flashing lights and they are injected, you can subsequently give them the flashing lights and they probably will turn out — the histamine release will occur. That can be caused by emotional stimulation, and allergists can tell you that as well. Is that a useful test? I think that a committee can determine whether or not it is. I can't tell you what studies have been done along those lines.

I'm sure, however, that if that were determined to be a useful study to pursue or to follow, that a committee would say, fine, go ahead and do that testing.

We need that information. It needs to be done in a humane

fashion. I don't see why it should inhibit studies. I think it would eliminate 16 different people doing the same thing in an erratic manner because, you know, you can do testing to try to achieve the same point, but if everybody's doing the testing in a different fashion, you can't compare the data. So it might even help us to put data together that would be more useful.

For example, let me use your example. If I use 30 rats and the next experimenter uses 30 rabbits and the next experimenter uses 30 mice and the next one uses 30 monkeys and the next one uses 15 rats and the next one uses 20 monkeys and the next one uses 5 mice, you cannot compare those results. So perhaps if we have closer scrutiny of the testing being done, you'll end up with better data being found and humane treatment can go on, you know, you may eliminate some of the tests that are not considered useful.

- Q. Well, Doctor, it just seems to me that you're comparing apples and oranges so that, you know, this bill is supposed to be about humane treatment, not about the validity of research.
- A. I agree with you. You asked me about the validity of research in that particular instance.
- Q. I asked you whether you think this is inhumane and whether--

A. I don't think it's inhumane unless it's unnecessary, and if it were being done simply one group enjoyed doing this thing and it's been done in 50 other places, then it becomes inhumane.

- Q. Well, I suppose, I am not certain about it, apparently you believe that the Draize test and L.D. 50 tests are presumptively that there is an irrefutable presumption that the L.D. 50 test and Draize test have no validity and regardless of how useful the results may be, we shouldn't perform those tests?
- A. I don't think those results are useful, and that's what I'm saying. If testing--
 - Q. They are not useful per se?
- A. Right, and I don't think that anyone, really, very many people are going to tell you that the Draize test is very useful.
- Q. So that all the people who are doing the Draize test and L.D. 50 are simply wasting their money?
- A. I believe so. I think testing can be done, scientific testing can be done, but the Draize test really isn't a very good scientific test. So the information you get is not going to be very useful. If you do a test well, if you do it scientifically with a scientific method, I think that's a term that we all grew up with, you'll get good data. If you use a test that's not very

useful, your data is not going to be very useful.

CHAIRMAN CALTAGIRONE: Representative Veon.

REPRESENTATIVE VEON: Thank you, Mr.

Chairman.

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BY REPRESENTATIVE VEON: (Of Dr. Heller)

Doctor, thank you for being here today. ο. wanted to follow up on your point that you made just in the last couple of sentences about the Draize test not being necessary. Well, I have various documentation from really these three agencies, all of which are dated 1988. Maybe you can shed some new light if this has changed, but I have a letter from the FDA, I have a letter from the EPA, and a letter from the U.S. Consumer Products Safety Commission who obviously all have varying regulatory functions in testing of products. It is my understanding, at least reading these letters and very specific questions asked them in response to the bill in New Jersey that if the Draize test is necessary in their specific regulatory areas. All of them have a different area, of course, and that the answer from all three of them was yes. This was letters in response to the bill in New Jersey. And I can give you the specific question and answer they gave, which was rather lengthy, but the question is, is the Draize test necessary to perform your regulatory function? And these letters say yes, but these were 1988 and I wonder if

1 you had --2 REPRESENTATIVE KOSINSKI: Mr. Chairman, 1s 3 the person, Representative Veon, who wrote that a medical 4 doctor? 5 REPRESENTATIVE VEON: No, Ph.D., 6 Commissioner of Food and Drug. 7 REPRESENTATIVE KOSINSKI: Ph.D. It doesn't 8 say what his Ph.D. is in, it doesn't have any background 9 of medical research. What are the things--10 REPRESENTATIVE PICCOLA: Mr. Chairman, I 11 object to Mr. Kosinski interrupting Mr. Veon in his 12 questioning. Mr. Kosinski will have the opportunity to 13 ask questions when he's duly recognized. I think the 14 procedure of a public hearing is to let each member ask 15 questions--16 CHAIRMAN CALTAGIRONE: Certainly. 17 REPRESENTATIVE PICCOLA: -- and not to be 18 cross-examined by the members. 19 REPRESENTATIVE KOSINSKI: We'll carry on the 20 debate later on this afternoon at our taping, Jeff. 21 REPRESENTATIVE PICCOLA: I'm looking forward 22 to it, Jerry. 23 CHAIRMAN CALTAGIRONE: Thank you, gentlemen. REPRESENTATIVE VEON: I understand the 24 gentleman, Mr. Kosınski's question, and the answer in each 25

of these cases may be yes, may be no. I'm not sure.

What I'm trying to get to, obviously, is that they attempted to articulate an official position of the Food and Drug Administration, the Environmental Protection Agency, and the Consumer Products Safety Commission, and each of them have tried to articulate an official position.

BY REPRESENTATIVE VEON: (Of Dr. Heller)

- Q. And I just wanted to follow up on that, based on your question, and you may or may not be familiar with this, I didn't mean to put you on the spot, but if you have some opinion as to their positions, I'd be interested in hearing that.
- A. Well, yes, I do, and it's the same thing
 I've been saying, I think. The testing has been done for
 years. It really hasn't helped us physicians make
 decisions about how to treat exposures, all right? It
 doesn't always cross. The information that you get from
 the animal does not always cross to the human, okay? The
 Draize test, in particular, the scientific community I
 think would say that it is not a very scientific test.
 It's -- it doesn't give you very good data. It's too
 subjective. So that you have three commissions or people,
 I don't know who those people are that you're referring
 to, saying that perhaps they're administrators, perhaps

they work for the EPA, I assume, and are paid by the EPA. They're not the physicians like myself who are out in the front lines. Now, I'm not an emergency room physician, so routinely I do not treat poisonings, but as a physician, I certainly do get an awful lot of phone calls. An obstetrician gets a lot of phone calls about medications. What can I take? What should I avoid? And we don't use the information gotten, for the most part, from animal testing, particularly the Draize test, to tell people what to avoid.

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Q. I appreciate that from a perspective of a member who is trying to make up his mind on this issue. Ι guess the point I'm trying to make and wanted to get some feedback from you on was that these are official positions of three Federal regulatory agencies who are telling State legislators that these tests are necessary for us to do our job as we attempt to regulate these products, as Congress directs us to do. So I'm trying to get some feedback here, and I know that there are other folks who will be testifying today that maybe can elaborate on that, but I think that would be, at least for this member, an important point as to their official position, how that relates to our role and job as State legislators in trying to determine how we ought to vote on this issue, and I appreciate your--

I'm going to go back to my bottom line as a 1 Α. 2 clinician. I'm the one who gets the phone calls about, can I use this? Can't I use it? What do I do with it? 3 4 And you can ask almost any practicing physician, whatever 5 their field, when you get that question, you do not go and 6 say, well, 16 rats died. What you do is look at what's 7 happened to humans. It doesn't make a lot of sense to use 8 the animal data. 9 Now, the Draize test specifically, you're

Now, the Draize test specifically, you're talking about a poorly performed scientific test.

Therefore, if the test is poorly performed and not a good test, the data will follow. It is not useful data. It's not the data that we use from day to day. The data we use from day to day, and we're the bottom line, we're the guys at the bottom of the pecking order here, the data that we have to use as our patients individually call us is the data on humans.

Q. Thank you very much, Doctor.

REPRESENTATIVE VEON: Thank you, Mr.

Chairman.

CHAIRMAN CALTAGIRONE: Thank you.

Thank you, Doctor.

We do have Representatives Bortner and McHale that have also joined the committee.

Next would be Dr. Frederick Ferguson,

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Professor of Veterinary Medicine from Penn State
University, and Director of Laboratory Animal Services.

DR. FERGUSON: Mr. Chairman, members of the committee. My name is Frederick Ferguson, and I am a Professor of Veterinary Science and Director of Laboratory Animal Resources at the University Park Campus of Pennsylvania State University.

My statement this morning is a result of my concern about the potential impact of House Bill 873 on the research environment in the Commonwealth of Pennsylvania and my concern about the poor cost/benefit ratio of this legislation in light of other existing and pending regulations and laws.

The use of animals in the advancement of scientific knowledge has provided many important contributions of which we are all beneficiaries. A prime example of this is the fact that a majority of the significant research advances made by the Nobel laureates alone in medicine and physiology in the last 88 years have depended to some degree on the use of animals. I suspect that each of us can identify some of these contributions, such as the development of the polio vaccine, or the definition of the genetic complex associated with tissue transplantation, that have positively impacted on our lives.

The use of vertebrate animals in research is a very complex societal issue which, through the years, has required public assurance that animals used for these purposes are provided proper care and handling. Since the early 1960's in the United States, the need for this assurance has resulted in considerable legislative and regulatory activity that is impacted on the use of animals. An eminent danger, I believe, of this activity is that future research which would improve the health and well-being of both animals and man may be seriously impeded by excessive regulation.

House Bill 873, amending Title 18, Crimes and Offenses of the Pennsylvania Consolidated Statutes, regulating animal research and providing penalties, has the potential to have a significant negative impact on research throughout the Commonwealth of Pennsylvania.

Now, I'm not going to go through in detail the rest of the things in my statement because of the time involved, but I would like to, first of all, express some of my specific concerns about this bill. And some of these have already been discussed.

This bill duplicates many Federal statutes, regulations, and guidelines pertaining to the care and use of animals for research purposes. As a result, I feel it would necessitate or require unnecessary expenditures of

both money and labor by research organizations within the Commonwealth, and in addition, by the Pennsylvania Department of Agriculture. I think the economic impact would be considerable, and I think it's extremely important that this be carefully evaluated before this bill is passed.

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My second concern is, and again, this has been addressed already this morning, if the purpose of this bill is to license those organizations not covered by existing Federal laws and regulations, this should be more clearly stated. Persons and organizations covered by related Federal laws and regulations should be excluded from the provisions of House Bill No. 873.

My third concern is that as proposed, this bill presents no support for the improvement of the Commonwealth research environment. In contrast, a bill which would support funding to improve existing animal research programs would be well received. Funds could be effectively and very constructively used for improving research programs and facilities for primary housing, for creating of personnel involved in care and use of animals throughout the Commonwealth.

There are, and I've listed in my statement, a number of the areas where I feel there is duplication. Specifically, there is, I think, in terms of licensure or

registration; concerns about humane handling, care and treatment; inspections, both unannounced and announced; the training of researchers; technicians in attendance; and the formation and role of the institutional animal care and use committee. The specific existing and pending laws and regulations I've proceeded to describe here, but basically they include the Animal Welfare Act, which was first passed initially in 1966 and subsequently has been amended three times, and presently we have regulations related to the 1985 amendment that are pending and should, in fact, been in effect if things move as they are intended sometime this summer.

Briefly, the regulations that are pending indicate that institutions covered by the Animal Welfare Act must have an institutional animal care committee consisting of three members, one of which is a veterinarian, the second member has to be a non-institutional affiliated person who is able to represent the public and the community. This committee must review all protocols involving the use of animals and make semi-annual inspections of animal care and use locations. It has to provide reports, both to the institutional officials, and items of noncompliance must be reported to the United States Department of Agriculture.

The second bill that impacts on research that is in existence is the Health Research Extension Act of 1985. This act changed the Public Health Service Act and included in it a number of things, again, that are duplicated in the bill that we're considering this

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6 morning, and I won't go into all those. They are listed.

One of the specific things that the Public Health Service Act amendment required was the protocol review process by an institutional committee. And I've listed on one of the pages the kind of things that go into that protocol review process. This protocol review process has required institutions to set aside a great deal of professional time in committee service to review these protocols, but the protocol review includes, for example, the requirement that it must include a detailed description of the proposed use of animals, and I think the important word there is "detail". It has to identify the species, the strain, age, sex, numbers of animals. Numbers of animals is very important. It has to justify the use or the rationale for the use of animals. to indicate veterinary care provisions that are available for these animals. It has to describe the housing conditions that these animals will be maintained under. It has to provide an assurance of what the training and qualifications of the personnel doing the work is. It has

to describe the use of analgesics, anesthetics, tranquilizers, and restraint that may be necessary in carrying out a particular project. And finally, it has to describe the methods of euthanasia.

Now, another document that first evolved in the early 1960's was the "Guide for the Care and Use of Animals," which was produced through the Public Health Service. It's an NIH publication. It's been revised repeatedly. It's been termed a living document in the sense that it's meant to respond to changes that are occurring as far as research activities nationally, and I think it has done a very good job of doing this. And I do believe that most institutions and organizations doing research on animals do use this guide as an important basis for providing them with things to relate to as far as projects and research activities.

There are a number of other legal and regulatory provisions that impact on the use of animals - the Endangered Species Act, the Marine Mammal Protection Act, and certainly the Good Laboratory Practice Regulations.

Now, as far as enforcement and implementation of all of these various regulations, there are a number of systems already in place that have this responsibility and carry out these functions. They

include the Animal and Plant Health Inspection Service, the Public Health Service, a number of other Federal agencies such as the Food and Drug Administration. There are also -- there is also a nonprofit organization called the American Association for the Accreditation of Laboratory Animal Care that many institutions participate in within this State and nationally.

Under the Animal and Plant Health Inspection Service activities, which is part of the USDA, unannounced inspections are carried out by a Federal employee to make sure that institutions do comply with requirements of the Animal Welfare Act. Research facilities have a number of obligations under the act and have to be able to provide the information that these inspectors require.

With the changes in the Public Health
Service Act, the Public Health Service has instituted a
program of unannounced inspections to research animal care
and use programs. In addition, granting agencies' review
teams where there are animals involved with research
projects very frequently will ask to look at the animal
facilities and review the programs in place that are
important as far as the care and use of laboratory
animals.

The American Association for the Accreditation of Laboratory Animal Care carries out

inspections for those institutions that are involved with it, and it uses a Public Health Service Guide and the Federal Animal Welfare Act as a primary reference document for its peer review process.

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And finally, within the State of
Pennsylvania, under Act 225, the Dog Law, research
facilities using dogs are inspected by a representative of
the Pennsylvania Department of Agriculture.

The next item in my statement related to licensure, and this has been addressed to some extent already. The concern is that I don't believe that the bill clearly indicates just who should be licensed and who shouldn't be licensed, and also who then will be covered by the State enforcement through the United States

Department of Agriculture, should it exist.

work with monkey and human kidneys have enabled the growth of human polio virus in cell culture. I think a lot of us here perhaps were alive at the time that polio was a very serious disease in the world, and it isn't anymore.

Animals were important as far as that research is concerned. Today we're confronted with other diseases — AIDS disease, Lyme Disease. We and those to follow us, including animal populations, will undoubtedly be dependent upon the special benefits that are provided by

1 the use of animals and human surrogates to improve the 2 quality of our lives. We are obligated to protect the 3 privilege of using animals in research, however, I think 4 we must also protect the resultant benefits by not 5 overregulating research in the Commonwealth of 6 Pennsylvania. I think what we have to consider seriously 7 when we look at this bill is whether or not the 8 expenditures that could result really are necessary in light of what already exists. 9 10 Thank you. 11 CHAIRMAN CALTAGIRONE: Thank you. 12 Jerry. 13 BY REPRESENTATIVE KOSINSKI: (Of Dr. Ferguson) 14 Q. Doctor, how much would this cost Penn State 15 specifically? 16 Α. We're talking about the State bill now? 17 0. Um-hum. Penn State, specifically, I'm not sure, 18 quite honestly, it would cost us a whole lot. 19 20 Q. A whole lot. How much is a whole lot? I can't put a figure on it, okay? 21 Α. 22 Could you get that information to me? Q. 23 I possibly could, yes. We do, since I think 24 as I said, we already have many of these things in place. 25 They duplicate. I think some of the areas of costs that

would be involved with this would be if there are additional inspections, additional paperwork, and additional bureaucracy to be superimposed on an already pretty substantial one.

In addition to that, I think what I'd be more concerned about as a taxpayer in the State of Pennsylvania is the cost that's going to be incurred to the Pennsylvania Department of Agriculture. It's going to be substantial.

- Q. But you can't identify the cost. See, you used the term "substantial" a lot--
 - A. I can't. I wish I could.
- Q. --but as a legislator, we have to deal with specifics.
 - A. I'm not an economist. I'm sorrv.
- Q. If you could get me those figures, I'd appreciate it, because I don't want somebody to give us information that is faulty.
- A. One of the difficulties, I might say, with providing that kind of figure, just as it has been with the Federal laws, is that until we see the regulations, there's really no good way to give you a fair projection, and in fact with the regulations that exist for the United States Department of Agriculture right now, we've seen figures of a billion dollars, we've also seen figures of

- 1 \$2 billion to \$4 billion. We don't know. 2 Okay. Have you ever appeared in front of a Q. 3 Federal legislative body? 4 Α. No, I have not. 5 Q. On such legislation? 6 No, I haven't. Α. 7 0. Do you know the standard or the stand Penn 8 State took on whether they wanted tougher Federal 9 standards or lessened Federal standards in this area? 10 Α. I'm not sure what you're asking me. 11 Has Penn State lobbied the Federal Q. 12 government for either tougher standards in these areas or 13 lesser standards in these areas? 14 I don't know that we've lobbied either way 15 on some of these things. I think in fact where there has 16 been some concern about what the content of a particular 17 bill or piece of legislation is, there has been some 18 lobbying done, yes. 19 Okay, you don't know which way, though? Q. 20 I would guess in most cases it was against any kind of additional bureaucratic concerns, you know, 21
 - Q, But you still say in the broader
 philosophical question that the Commonwealth can send you
 \$220 million a year to support your university, but we

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that might be projected.

shouldn't have any say in what goes on in that particular university?

- A. No, I'm not saying that.
- Q. Okay. One thing I want to correct the record on. Page 1, concern 3, "the Bill presents no support for improvement of the Commonwealth research environment." I am somewhat insulted, as a legislator who sits on the Education Committee and who's been to Penn State -- I am a Penn State grad -- on a number of occasions to help fund a number of your projects, including the microbiology lab. You're familiar with that, Doctor?
 - A. Yes, I am.

- Q. We've helped with that, and we've helped a lot, and we've helped with the Ben Franklin Partnership
- A. What I'm referring to here is specifically those things that impact on the use of animals.
- Q. Well, would the microbiology lab impact on animals?
- A. It may very well in terms of research, but it certainly hasn't impacted on things that we might do directly in terms of providing things for the animals that are used in that research.
- Q. The term you use is "Commonwealth research environment".

1	A. Well, perhaps I should have changed that.]
2	do go on there to discuss the specifics of what I was
3	talking about.
4	Q. Because we've been very good in a number of
5	programs that way, and it takes me a bit aback when I'm
6	told that we're not.
7	A. There's no doubt about that. I think
8	Pennsylvania State University appreciates that.
9	CHAIRMAN CALTAGIRONE: Representative
10	Murphy.
11	BY REPRESENTATIVE MURPHY: (Of Dr. Ferguson)
12	Q. Doctor.
13	A. Yes, sir.
14	Q. Your testimony really very much focused on
15	the potential redundancy between Federal and State law,
16	and I assume that's a legitimate concern, and let's, for
17	the moment, assume that we address that by amendment of
18	the bill and put together so that they fit nicely in State
19	and Federal regulation. Can I assume that you have no
20	opposition to the search warrant provisions? Removing the
21	exclusion of research laboratories in the search warrant
22	provision?
23	A. Well, I, quite honestly, don't want to get

into the search warrant provisions. I think there are

some other people here that will discuss it as far as what

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the concerns are. I would say that where my concern would be would relate specifically to who is involved with doing the searches and what is the outcomes of the searches. Because I can think of instances where there is research going on and maybe more so in terms of what's going on for the benefit of animals where, say, there are genetic models of, and I know based on experience that in visiting other research facilities around the country and veterinary schools and so on where there is this kind of research going on where we're trying to understand better disease processes in animals, it's extremely important that the people that would come in and look at this process or look at what's going on be able to make a judgment, I think, of how it relates to whatever determination they might make. In other words, the research or the scientific part of the activity, I think, has to be a part of any evaluation of this type that would go on.

- Q. You understand the search warrant provisions are the same that you live under today as an individual in the Commonwealth of Pennsylvania?
- A. That may very well be, you know, but I don't have a problem with that if that, in case, is a fact. But I think we have to look very carefully at how it's worded and what would come out of something like this.

Q. I understand that.

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The L.D. 50 and the Draize test, Doctor, do you have any problem with prohibiting those? In fact, does Penn State University conduct the L.D. 50 or the Draize test?

- A. On occasion -- they wouldn't conduct an L.D. 50, that I'm aware of, or a Draize test, per se.
- Q. So you have no involvement with those tests and that part of it would not impact you at all?
- A. I can't say that. It could potentially impact us. Certainly we have a biotechnology institute and we have people who possibly could be doing things where this kind of test may be necessary. It is not something I think that anyone enjoys having to do. It is something I think that has been referred to here this morning that on occasion, at least as far as the information we have available, doesn't have a substitute.
- Q. And finally, Doctor, if the Federal regulations have been adequate, why did the University of Pennsylvania Head Injury Laboratory happen, Biosearch, the kind of abuses happen, or why have there been any number of other instances around the country where there have been actions taken against facilities, prestigious facilities regulated by the existing Federal law, as you say, are adequate and they've been found to be seriously

inhumane in significant violations to existing statutes? 1 2 I'm not sure of the relevance of your Α. 3 question for several reasons. 4 Q. The relevance, Doctor, is that you're 5 telling us that existing regulations are adequate. 6 A. Well, let me say something. 7 Let me finish, Doctor. You guoted that in Q. 8 1985, in fact some of the existing regulations -- most of 9 the existing regulations that you say are adequate --10 covered what went on at the University of Pennsylvania. 11 What year did the thing at the University of Α. 12 Pennsylvania happen? 13 1985. Biosearch was 1988. Q. The Institute of Behavioral Research in 14 15 Maryland was 1986 and '87. 16 I'm not sure about those dates, okay? Α. 17 0. I am. Okay. Well, if in fact they are, I'd like 18 19 to check those dates and make sure that they get entered, 20 because I think they are important. There have been some changes in the Federal regulations that have resulted from 21 22 these, and I'm not going to sit here and tell you that

there aren't instances where problems may occur, okay?

drunken drivers and people die because of it. I'm not

It's like anything else. It's the same reason we've got

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going to say that doesn't happen. I'm saying that we do have some extremely good regulations in place. We've got some regulations pending that are going to impact tremendously on us, and I think to superimpose on this some additional things at this time, you know, isn't necessary.

CHAIRMAN CALTAGIRONE: Representative Hagarty.

REPRESENTATIVE HAGARTY: Thank you.

BY REPRESENTATIVE HAGARTY: (Of Dr. Ferguson)

- Q. I'm trying to understand the Federal and State regulations you're referring to. Are you indicating that -- I thought that I heard the sponsor say when he testified that those institutions that are now federally regulated would not be required to be State regulated. If that's the case, do you have any objection to State regulations?
- A. That was one of the concerns that I had in my statement.
- Q. But if that were clear, and I think that's what the sponsor said, you then have no concern about State regulations as long as--
- A. It depends on what those regulations are and what they pertain to. Okay? Because I think that some of the things that are here go beyond what presently exists

1 as far as Federal regulations are concerned, and I think 2 we have to look at those very carefully. 3 Q. I see. You support Federal regulations, you 4 support an amendment, but you don't support State 5 regulations going beyond them, is that my understanding? 6 That would depend. No, I'm not saying that. Α. 7 I'm saying I think we have to look at what those State 8 regulations are that we're talking about and what they 9 address. 10 Okay, I understand your answer. Could you 11 tell me, I don't know, what types of institutions are not 12 covered by Federal regulations? 13 Α.

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- Secondary schools, I believe, are not covered. There are some exclusions based on the species of animals that are used. This particular law, 873, covers all vertebrate animals. The Federal law doesn't at this time. It covers warm-blooded animals. Some of the Federal regulations do cover vertebrate and other guidelines and so on do cover vertebrate animals. There are some organizations that are excluded.
- 0. That aren't covered. All of the regulations and laws that you refer to, are they Federal? Throughout your testimony you refer to the various existing regulations and laws. Are they all Federal?
 - They're all Federal except for the State Dog Α.

Law which exists.

- Q. I'm familiar with that. And I have one other question. I do not intend to prohibit research that is necessary for medical improvements, and so I'm curious, what specifically, what specific language in this do you see that will harm the use of animal research or impede the use of animal research for medical advances?
- A. I think the problem really is the fact that the bill isn't that specific.
 - Q. But that's not legitimate.
 - A. I know that.
- Q. You can't tell me that a tone of a bill has the effect of law and is going to prohibit research. And so what I've said, and I've said it to the other people who have talked to me about this is, tell me what in here do you think will impede research? Or if not, what language do you need to change?
- A. I think any time that we superimpose additional regulations on the process of research, we're going to impede research.
- Q. So there's nothing specific in here though that you think will impede the use of animal research in medical advances?
 - A. Oh, I do think there is.
 - Q. What?

1	A. I think once we start superimposing
2	additional requirements on the researchers doing
3	experimentation, and we've already done that with some of
4	these Federal laws and new Federal regulations. There's a
5	great deal of time that's required by our faculty at Penn
6	State, for example, that goes into this process.
7	Q. But I'm not going to vote I don't vote on
8	Federal rules. All I want to know is if this only applies
9	to institutions that aren't now covered by Federal
10	regulations, other than the two specific tests that we've
11	heard about, what specifically in here will impede
12	regulations? Not what Federal regulations have done.
13	A. Okay, I didn't understand your question
14	then.
15	Q. I don't vote in the United States Congress.
16	A. If you're excluding those covered by Federal
17	regulations, then I can't speak to that specifically, but
18	because, for example, our university and most of the major
19	research organizations in the State of Pennsylvania are
20	covered by existing Federal regulations.
21	Q. Thank you.
22	CHAIRMAN CALTAGIRONE: Representative
23	McHale.
24	REPRESENTATIVE McHALE: Thank you, Mr.

Chairman.

BY REPRESENTATIVE McHALE: (Of Dr. Ferguson)

Q. Doctor, I listened carefully as you answered the questions presented to you by Representative Murphy, and I didn't understand your answers in their entirety. You indicated that subsection (d) on page 3 of the bill could have an adverse impact on potential research and other related activities at Penn State, and what that section says is "Prohibited tests.— A person may not subject a live animal to an eye irritancy test, including the Draize eye irritancy test, or use a live animal in an acute toxicity test, including the L.D. 50 test," and I emphasize now, "for purposes of testing cosmetics or household products."

How could that conceivably impact upon Penn State?

- A. Well, if we're talking specifically about that, I would guess that it probably would not directly. I can't speak--
 - Q. How would it indirectly?
- A. Indirectly, it's possible that there may be something that is developed--
 - Q. Does Penn State test cosmetics?
 - A. No, it doesn't.
 - Q. Or household products?
 - A. No, it doesn't, but there is the possibility

that something that could be developed at Penn State would ultimately end up in that role as far as the use is concerned.

- Q. When was the last time Penn State conducted those kinds of tests specifically for purposes of evaluating cosmetics or households products, as the bill is currently limited? When was the last time you engaged in that kind of research?
- A. I can't even -- not in my experience at Penn State, which has been considerable.
 - Q. So you've had no past experience?
- A. Right. If we're talking particularly about Penn State, okay, but this bill doesn't talk just about Penn State. It talks about--
- Q. May I limit that? The question from Mr. Murphy had to do with Penn State. You appear before us today based on your credentials at Penn State.
- A. No, I don't. I'm really appearing here as an individual and not necessarily as a representative of Penn State.
- Q. That was going to be a later question that I was going to present to you.
 - A. Okay.

Q. But at this point, the question was raised by Representative Murphy as to how this would impact upon

Penn State. We, as State legislators, are concerned about that because Penn State is obviously one of our finest State institutions. You implied, if not stated, in your earlier answer that that section would impact upon Penn State. I'd like to know how?

- A. I can't honestly say that the potential doesn't exist that it would, okay?
- Q. If you could amplify that and tell us how cosmetic testing and household product testing, using these types of toxicity tests, could impact upon Penn State?
 - A. Okay, let me give you a for instance.
 - O. Please.

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A. See, one of the things that is obviously occurring at many educational institutions throughout the country and throughout the world is that there are a number of initiatives that relate industry and universities, academic institutions. And I think the possibility does exist, could exist, I'm not saying it will exist, that there may be something that would be developed for those purposes that would ultimately -- for example, the patenting, okay that would ultimately develop in terms of patenting that could be dependent on something that might be inferred as far as this kind of testing, toxicity testing. Certainly the University of Wisconsin

1 has benefited through the years tremendously, its research 2 program has benefited tremendously, from something that 3 we're all familiar with called Warfarin. It was named 4 that because it came from Wisconsın Alumni Research 5 Foundation. Warfarin, as you may or may not know, is a 6 The University of Wisconsin has acquired a retinocide. 7 great deal of money for its research programs because of 8 the use of that product, because of the patent rights 9 associated with that product. 10

- Q. But to the best of your knowledge, this type of testing has never previously occurred at Penn State?
 - A. Not that I'm aware of.
- Q. And to the best of your knowledge, there are no current plans for such testing at Penn State?
 - A. That's true.

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- Q. Well, I think that's a different answer, at least implicitly a different answer, from the one that you gave Representative Murphy a bit earlier.
- A. Okay, well, in a sense I may have misunderstood Representative Murphy's question, because again, I hope that my intent is, I think, to answer these questions more as it relates to the environment in Penn State.
- Q. Well, we're talking about a bill, not an environment. I look at the patch that you're wearing,

"Animal Research - We All Benefit." Frankly, I agree with that statement, but that's not the issue under consideration in this legislation. It's not a question whether animal research can potentially benefit human health. It can. I think that's quite clear. And for that purpose, I support it. But when I look at subsection (d), which is limited to the testing of cosmetics and household products, I think that's a very different issue.

- A. But you're talking about a specific subsection here and what it relates to--
 - O. That's correct.

- A. And what I'm talking about or what I was speaking to was the whole bill here.
- Q. I think you're speaking philosophically and we're speaking texturally. We're addressing a certain specific piece of legislation, not a broader social issue, and I don't want to take up a great deal of time.
- A. Right. You're addressing a particular part of that piece of legislation right now. I think other people here are more qualified to address that issue and will as the morning or the day goes on.
- Q. The second section, "Refusal to participate in experimentation.--No employee or student who refuses to participate in experimentation, research, or teaching methods involving dissection or vivisection shall be

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penalized for refusal to participate based upon the individual's fundamental beliefs." Do you object to that?

- A. I don't object to that.
- Q. Are you aware, you were speaking earlier in terms of the redundancy that you allege to exist in this proposed legislation, proposed statute, are you aware of any other State or Federal law which gives this kind of protection based on the beliefs of conscience held by an individual student? Would this be redundant?
- A. I can't speak to that. It's not something that I'm that well-informed on, quite honestly, so I'd rather not address it.
- Q. But to the best of your knowledge, as you sit here today, you're not aware of any other Federal or State law that grants this kind of protection, are you?
 - A. No, I'm not.
- Q. All right, my final question is, you indicated earlier that you do not appear as a principal spokesperson today on behalf of Penn State, that you appear in a private capacity. The credentials, however, that identify, you indicate that you're the Director of Laboratory Animal Resources at the University Park Campus of the Pennsylvania State University, but you've not been directed to appear today on behalf of Penn State, have you?

1	A. No, I have
2	Q. How did it
3	us today? Are you repres
4	A. No, I'm her
5	my concern.
6	Q. I don't mea
7	see that you're wearing t
8	worn by most of the other
9	our audience. Is that a
10	A. No, it's no
11	what the badge says, so.
12	REPRESENTAT
13	Thank you,
14	CHAIRMAN CA
15	Representat
16	REPRESENTAT
17	Chairman. I have just a
18	BY REPRESENTATIVE HECKLER
19	Q. I understan
20	with scheduled hearings w
21	the folks are going to ad
22	one position on a bill to
23	matter, and it's plain th
24	the risk of taxing you fu

- not.
- come that you did appear before enting any other organization?
- e as much representing myself and
- n to draw any conclusions, but I he same patch, the same badge, corporate interests sitting in coincidence?
- t, because I guess I agree with

IVE McHALE: All right.

Mr. Chairman.

LTAGIRONE: Thank you.

ive Heckler.

IVE HECKLER: Thank you, Mr.

few questions and an observation. : (Of Dr. Ferguson)

d, and it is frequently the case ith long lists of witnesses, that vocate one view of an issue or sort of break down their subject at that's occurred here, but at of taxing you further, Doctor, I would ask -- I mean, frankly, one of the provisions of this bill that

jumps out at me is the elimination of the prohibition on the issuance of search warrants to people about whom we have no particular guarantee of training who are officials of associations for the prevention of cruelty to animals to conduct searches at biomedical research facilities. If that, and I won't ask you to deal with it at length, there are some other witnesses going to, but would that repeal, looking at that part of the bill alone, if we simply took that language out of existing cruelty to animals law, would that have an impact on Penn State, and if so, what?

- A. If you took the wording that already exists in the bill out? Is that what you're saying?
- Q. No, no, I'm sorry. The law right now, the cruelty to animals law, contains language which says no search warrant -- first of all, contains a body of language authorizing issuance of search warrants to agents of cruelty to animals, associations for the prevention of cruelty to animals and similar organizations incorporated under the laws of the Commonwealth. At the end of that authorizing section, there is a specific prohibition. That prohibition says, "No search warrant shall be issued based upon an alleged violation of this section which authorizes any police officer or agent or other person to enter upon or search premises where scientific research work is being conducted by, or under the supervision of,

graduates of duly accredited scientific schools or where biological products are being produced for the care or prevention of disease." This bill proposes to take out that prohibition, thereby authorizing agents of such organizations to obtain the issuance of search warrants upon the allegation that cruelty to animals is occurring in those facilities. Those search warrants would authorize the seizure of those animals as evidence of those alleged violations. Would that impact on Penn State, and if so, how?

- A. Yes, I think it has the potential to do
 that, because I think it has the potential to result in
 someone coming in and examining animals that are being
 used in particular kinds of research studies that may have
 conditions that because of the backgrounds of the people
 that would be doing or carrying out the search warrants,
 they wouldn't be able to understand exactly why those
 animals are there and what their purpose is in terms of
 value, and some of these animals are extremely valuable.
- Q. My next question, the institutional care committees which would be required under this legislation, and as I understand it, Federal law and regulation already requires in those institutions which are federally regulated the existence of such a committee, is that correct?

- A. That's correct.
- Q. This bill mandates that one of the members of any such committee be a member who is a representative of an incorporated humane or animal welfare organization. Is that presently a requirement under Federal law?
- Q. That is not presently a requirement under Federal law.
- A. If this additional requirement were viewed to impact upon Penn State, even though it is federally regulated, upon the passage of this legislation, do you have any opinion whether that provision would impact upon Penn State, and if so, how?
- A. Again, I think it has the possibility of impacting significantly. Until you've been involved with the committee process that has evolved, our committee, for example, and I use it as an example, but I think it probably reflects what's going on nationally and in other areas within the State. Our committee meets weekly, or part of our committee meets weekly, possibly sometimes for three to four hours in the form of subcommittees to consider protocols or projects that are being submitted. The committee itself meets once or twice a month, and the time involved there usually is a good part of an afternoon, it involves, in our case, as many as 14 or 15 faculty members. There's a lot of time involved with it.

The process is slow, it's done carefully. I think if we inject on top of this some people whose intent may not be directed at or be of the opinion that animals should be used for research, that the potential for harassment of these committees and the time expended and so on could expand considerably.

- Q. Well, let me ask another question along those lines. One of the -- certainly one of the broad philosophic objectives of this legislation is to make sure that somebody is counting the cost to animals, is not just saying, gee, it would be interesting to do this and not looking at the sacrifice that is being made by the animals who are being used for that. Of the present -- in other words, at Penn State you have such an institutional care committee. All right, is there any -- what members of that committee are likely to count the cost to animals, are likely to be an advocate, if you will, in that process for moderation for the animals' point of view, if you will?
- A. We have on our committee at Penn State right now, and again, this may not parallel other institutions, we have five veterinarians on our committee. We have a person that is an ethicist, a non-scientist, a philosopher, we have an outside member of the community at large that is not affiliated with Penn State University,

and these people are, along with the members of the committee, I might add, the other scientists that are involved with this committee are, I think, extremely concerned about the use of animals, how they're used, numbers, why they're being used, and so on. The process is a good process. It's been an interesting process, but it is a time consuming process.

- Q. To what extent are either the deliberations of that body or the written protocols or whatever is formulated by that body the public record?
- A. I think that's probably going to vary from organization to organization. The specific deliberations certainly are available through the various agencies that are involved with enforcement. As far as, you know, are they published or this kind of thing, I'm not aware they are. They may be for some organizations.
- Q. Well, it occurs to me that in looking at ways to try to address the legitimate interests of all sides of this issue, that one of the ways to address some of the concerns of those concerned about animals would be to provide some access at least to the results of that process and some ability to challenge decisions which emerge from that process which would seem not to be -- would seem to be egregious or not supportable scientifically, and that's why I'm wondering if the

Federal procedure creates that opportunity for somebody in some local ASPCA or some other organization to say, fine, decisions 1 through 15 we think are legitimate, but decision 16 is not appropriate. Is there any such procedure at this point?

as far as specific protocols are concerned. I think indirectly, you know, this exists. One of the things that definitely exists, the environment that we have today as far as research is concerned, I think both as far as industry is concerned and academic institutions, it's not easy to get research dollars, and when research dollars are given to someone, they're looked at very carefully by a peer review process. The animal end of things is definitely looked at in this process of the peer review.

REPRESENTATIVE HECKLER: Thank you, Doctor.

The one observation I would have is that I've heard now about the University of Pennsylvania Head Injury Lab. I really don't know exactly what practices were going on there which caused its closing. I hope maybe before the end of the day we'll hear, but I think this committee in our hearings about the possible toughening of the drug laws last week is certainly aware that we are imposing ever more Draconian legal sanctions upon crimes like the sale of drugs or the commission of

violent crimes, and we don't seem to be stopping them. I don't know that you can conclude because incidents of misconduct, if in fact the situations that are being cited involved misconduct, because they occur that the way we're going to solve them is to pass additional sanctions.

Thank you.

(Whereupon, Representative Moehlmann assumed the Chair.)

ACTING CHAIRMAN MOEHLMANN: Thank you, Dr. Ferguson. You may be dismissed.

DR. FERGUSON: Thank you.

ACTING CHAIRMAN MOEHLMANN: Finally, I imagine.

We will call now the next witness is Dr.
Marvin Kraushar. Is he here?

While he's making his way to the witness table, I might observe for the members of the committee that we are now one hour behind schedule and I imagine there are witnesses on our schedule who are placing some reliance on that schedule. I'm not suggesting to any member that he not ask a question that he has, or at least I'm not admitting to asking any member that he not ask a question that he has, but if you would, please be cognizant of the schedule. It will help us. Thank you very much.

1 Please proceed, Dr. Kraushar.

DR. KRAUSHAR: Thank you very much, ladies and gentlemen. Let me introduce myself to you. I'm an ophthalmologist, I'm an eye surgeon. I'm Clinical Professor of Ophthalmology at the University of Medicine and Dentistry in New Jersey, and an Associate Clinical Professor of Ophthalmology at the Mount Sinai School of Medicine.

And before I give my presentation, I feel compelled to relate to you a little story which just popped into my mind after hearing the testimony before me. I was a late arrival and I don't know how many people have spoken in front of me or who will be speaking behind me. I was a pitcher for my college team in baseball and one day I was having what I thought was a particularly good day, but evidently the umpire behind the plate didn't agree with me, and at one point I asked him if we were watching the same game. I said, "I just threw three perfect curve balls and you called every one of them a ball." And he looked at me and he said, "Son, if you can learn to throw that pitch, you'll be in the major leagues." And I responded, "If you learn to call it, we can both be in the major leagues."

I have done animal research in the past. I wholly support it. It has saved countless lives and I'm

certain in the future will save countless more, and it definitely has a place in our society. But unfortunately, it has no place in this bill. This bill is not talking about research for humans for biomedical research. We're talking about things like mascara, eyeliner, toilet bowl cleaner, things like that. And I've testified at meetings like this before, and usually there's somebody else who will come and testify that they've had 20 cancer operations or they are on chemotherapy for whatever and they are in favor of animal research. As a physician, I've dedicated my life to helping human beings, and I have empathy for these people, I sympathize with them and I think they are absolutely correct that animal research has a definite place. However, it has no place in this discussion today. It is just not germane to this bill.

Now let me get on to what I have to say.

I'm a member of the Board of Governors of the New Jersey

Academy of Ophthalmology. I am not speaking as a Board of

Governor member, I'm speaking for myself. There are four

parts to this bill which I have read, and I can see that

three of them are self-evident. I can't conceive anybody

would have a serious or reasonable complaint about any of

them.

As an ophthalmologist, I'm here today to speak mostly about the Draize test. Basically, the main

argument that the household products and cosmetic industry seems to have in favor of this test is that it's better than nothing. Well, I think it's worse than nothing. I don't know how many of you ever saw the movie "The Third Man." It was a good spy story, a very interesting movie. Basically, it had to do with a gentleman who was taking penicillin and diluting it so he could sell it and make a killing on the market, and actually what he did was made a killing in the hospitals because patients with infectious diseases that needed penicillin were given this drug which was tremendously diluted to the point where it was doing very little for them and they died. Well, that's what the Draize test is doing for research. It is discouraging attempts at finding other means of research.

First of all, there are no Federal agencies of which I am aware that require the Draize test specifically for testing household products and cosmetics. And more importantly, the Draize test is one which is old, archaic, and does not accurately correspond to findings in the human eye, and because of this, you can't extrapolate it to what's going to happen to human beings. So basically what we need is something a little better.

The cosmetic and the household products industry have three main points of complaint with respect to our legislation. They need something that -- they need

a product that will be safe and has to be tested. They need legal protection in case somebody has an accident with their product, and I can understand both of these, and they say it will cost money, which is true. But this is really no excuse because it's a small part of the budget of any of these large companies.

As far as legal protection goes, they say that they need something such as the Draize test so that if something happens, they can always say, well, here's the test. We have tested it, we've done the best we possibly can. And I understand their point, but relying solely on the Draize test, which is what many people are doing, discourages investigation of other media and other tests which are valuable in helping us test toxicity in the human eye. I can tell you I, as an ophthalmologist in practice for 20 years, have never ever in my life consulted the Draize test results before prescribing any medication for any of my patients. I don't know anybody who has.

But getting back to household products and cosmetics, as far as I am concerned, what we really need is to have more tests done of a non-animal type which accurately correspond to the actual result in the human eye, and this will really, truly protect humans who, after all, are our main concern.

I will be happy to answer any questions you may have.

ACTING CHAIRMAN MOEHLMANN: Thank you, Dr. Kraushar.

Representative Heckler.

REPRESENTATIVE HECKLER: Thank you.

BY REPRESENTATIVE HECKLER: (Of Dr. Kraushar)

- Q. Mindful of the Chairman's injunctions notwithstanding, I have just a few questions for you, Doctor. You have focused your testimony on section (d), I believe, of the act which speaks to the prohibition of Draize and L.D. 50 tests, and you've stated very clearly that this has nothing to do with medical research. You may have heard my questions to the prior witness. Do you have any opinion about the impact which authorizing agents of organizations for the prevention of cruelty to animals to execute search warrants at medical research facilities, do you have any opinion as to whether that might impact on medical research?
- A. I can see it impacting on medical research in only a minor way in that if violations are found, it will cost these laboratories some money to correct the violations, but I see no reason not to have legislation because of that.
 - Q. Well, are you familiar at all with the

1	process of the execution of a search warrant? I mean, let
2	me ask you, did you know that was in the bill before you
3	came here today?
4	A. Yes.
5	Q. Okay. And are you familiar with the process
6	of the execution of a search warrant?
7	A. As a layperson, basically I am, yes.
8	Q. So that if these folks who did not have or
9	at least are not required to have any particular
.0	scientific training or familiarity with the activity which
.1	would be occurring at the facility were to enter the
2	facility with legal authority and seize animals contained
L 3	there, you don't think that would that doesn't strike
4	you as particularly troublesome?
15	A. Not as particularly troublesome, no.
.6	Q. But you would agree that we're talking about
١7	something that impacts on medical research as opposed to
8	just Tidy Bowl?
.9	A. In that respect, yes.
20	Q. Thank you. That's all I have.
21	ACTING CHAIRMAN MOEHLMANN: Representative
22	Hayden.
23	BY REPRESENTATIVE HAYDEN: (Of Dr. Kraushar)
24	Q. Doctor, other than the Draize test, are you

aware of any other eye irritancy tests which are currently

being used either, let's talk about the cosmetic industry or through research laboratories in general, and I'll define eye irritancy test as it is defined here in the bill, which is described as "Any experiment involving the placing of a substance in an animal's eye to measure its irritating effects".

- A. Yes, I'm familiar with a number of them, but as opposed to taking up your time at this juncture, Dr. Barnard, who will be testifying after me at some point today, will be talking about that specifically, and I think he is better equipped to give you the more concise, appropriate answers to that question.
- Q. Okay, the question I have is, all those other range of tests which exist out there for eye irritancy tests, do you think we should ban all of those tests also?
- A. Well, if they don't use animals, and most of them don't--
- Q. Well, as I read this definition, I'm limiting it to as it's defined in the bill, which is "any experiment involving the placing of a substance in an animal's eye to measure its irritating effect".
- A. If there is no viable alternative, I can see using it. Under the present state of my knowledge, I am not aware that there are not viable alternatives.

1 Q. We may hear from Dr. Barnard, but my concern 2 with that particular reference in the bill is that in fact we are not here only talking about the Draize eye test or 3 the L.D. 50 test. The way this bill is written, we're 4 5 talking about every eye irritancy test, as I just read the 6 definition, and every acute toxicity test, so that's one 7 of my concerns is that if the language remains as is, we 8 would be banning all of those ranges of options, which I'm 9 not prepared to say whether we should or shouldn't, but that's one of my concerns. 10 11 Thank you. 12 ACTING CHAIRMAN MOEHLMANN: Representative 13 Bortner. 14 REPRESENTATIVE BORTNER: Thank you, Mr. 15 Chairman. 16 BY REPRESENTATIVE BORTNER: (Of Dr. Kraushar) 17 Q. Doctor, during your course of study to become a physician, starting with high school and through 18 19 college and medical school, did you ever dissect any 20 animals, reptiles, organisms? 21 Α. Yes. And do you think that was helpful in part of 22 Q. 23 your training? 24 Not really. Α.

You don't think so?

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- A. No, I don't.
- Q. So, I mean, as far as you're concerned, it's perfectly possible to become a medical doctor and other physician without ever having cut apart any kind of animal, reptile, and so forth?
- A. Absolutely. As a matter of fact, my medical school, Tufts University, doesn't use this in medical school at all anymore. They have animal models which they use for dissection.
- Q. And that was true -- is that typical or common with most medical schools?
- A. I can't honestly say, but I can tell you from what I have heard, I've begun making inquiries about this, that's how I know specifically about my medical school, and the head of animal research at my medical school wrote me a long, two- or three-page letter about this maybe seven or eight months ago where he implied, and again, he's implying now, I don't have any hard statistics on it, that close to a third of the medical schools in this country do the same at this point, and the number is growing yearly.
 - Q. Would you feel the same way about a cadaver?
 - A. No, that's totally different.
 - Q. Could you explain to me why?
 - A. Yes. A cadaver is a dead person. Painless.

Q. I understand that, but you can also dissect dead animals, can you not?

A. I suppose you can, but it depends on how they get dead. I wouldn't want to have to kill an animal first to say it's dead.

- Q. Well, I didn't suggest that. I'm asking you a question, whether you think these are valid teaching methods.
- A. At the present time I can only go by what my medical school goes by, and they're the experts with respect to teaching, and they don't use it.
- Q. Well, are you aware that this bill would allow a student to refuse to participate in any teaching methods involving dissection or vivisection?
 - A. I am not only aware of it but I support it.
- Q. Well, in your opinion, would that also involve dissecting cadavers or other dead animals or invertebrates, reptiles?
- A. I suppose it would, and I don't see what harmful effect that would have. I can't understand anybody going, say, to a medical school who would refuse to dissect a cadaver. A cadaver was not sacrificed in any inhumane manner, and you certainly aren't going to be able to treat a human or do surgery on a human if you haven't done some dissection to learn the anatomy.

- A. I see no problem with that. If you're talking about a high school student refusing to dissect a frog or a grasshopper, I don't see anything wrong with that.
- Q. When you say you don't see anything wrong with it, you don't see anything wrong with permitting somebody to make a decision or you don't see anything wrong with doing it?
- A. I don't see anything wrong with permitting somebody to make a decision not to do it. There are animal models available for high school laboratories as well to show them the anatomy.
- Q. And you would feel that that would also -- I'm not sure about your answer in the medical school.
- A. My answer in medical school is I feel it would be appropriate in medical school to dissect a cadaver because people are not, to my knowledge, inhumanely killed in order to obtain cadavers. And number two, the person is going to be dealing with the human body for the rest of their life, it's important to have an intimate knowledge of the anatomy of the human body. If there were, I suppose, a way to have a superb model of the human body, then you wouldn't even have to dissect that either, as a matter of fact, but I can only tell you that when a child is dissecting a grasshopper, to be honest

1	with you, I don't see what relevance that has to the rest
2	of their life that they can't learn from looking at a
3	plastic model of a grasshopper or something similar.
4	Q. Well, it sounds to me like your answer on
5	the medical school, in the medical school situation is
6	different.
7	A. Absolutely.
8	Q. This bill doesn't make that distinction, and
9	I'm trying to make that point.
10	A. Well, the bill may not make a distinction,
11	but I think it would be hard put to find a medical student
12	who has geared many years of his life to going to medical
13	school who, when confronted with a cadaver, would complain
14	that it is an inhumane act to dissect a cadaver.
15	REPRESENTATIVE BORTNER: I don't want to
16	continue this any longer. I have no further questions at
17	this point.
18	ACTING CHAIRMAN MOEHLMANN: Representative
19	Veon.
20	REPRESENTATIVE VEON: Thank you, Mr.
21	Chairman.
22	BY REPRESENTATIVE VEON: (Of Dr. Kraushar)
23	Q. Doctor, first of all, I appreciate you

focusing in on the important parts of this bill, and I

think that's helpful to us as a committee and I appreciate

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that for the sake of time also. You had mentioned that -I believe you mentioned this, correct me if I'm wrong,
that you're not aware of any government agencies that
require the Draize testing?

- A. For households products or cosmetics.
- Q. Yes. I have again, and I mentioned this before, you weren't here, I have letters here from the Food and Drug Administration, from the Environmental Protection Agency, and Consumer Products Safety Commission, all of which of course regulate different areas of consumer products and the testing of those products.
 - A. Forgive me for interrupting, sir.
 - Q. Sure.

- A. In the interest of saving you time, Dr. Barnard will be the person who can really speak to that question much more accurately than I.
- Q. All right, I'll reserve those for him.

 Just for the record, in your opinion on
 this, this bill clearly includes rats and rodents and it
 would be -- you would be in favor clearly in making sure
 that rodents and rats are included in this bill?
 - A. Yes.
- Q. And if you could just comment, I guess, on the juxtaposition of at least what would be most people's

1	thought in society of attempting to rid themselves of
2	rats, setting traps, et cetera, et cetera, in their homes,
3	outside their homes, and juxtaposition that with
4	attempting to include that species or those kinds of
5	animals in this bill. Do you have just a comment on that?
6	A. Having been born and raised in New York
7	City, where we have our own share of rats, two- and
8	four-legged, there are considerable problems with rat
9	populations biting children, causing disease, et cetera.
10	I think that is certainly in the public interest to
11	eliminate them wherever it's appropriate. With respect to
12	dissecting an animal in a laboratory or with respect to
13	experimenting on one where there are non-animal
14	alternatives which are viable, I don't see any
15	relationship between those two examples you have given me.
16	REPRESENTATIVE VEON: Thank you, Mr.
17	Chairman.
18	Thank you.
19	ACTING CHAIRMAN MOEHLMANN: Representative
20	McNally.
21	REPRESENTATIVE McNALLY: Thank you, Mr.
22	Chairman.

BY REPRESENTATIVE McNALLY: (Of Dr. Kraushar)

Q. Doctor, I'd like you to address a question that I had earlier begun to discuss with Dr. Heller. It

was her opinion, and apparently you would agree, that the L.D. 50 test and the Draize test are not useful per se, they have no utility whatsoever, they ought to be banned entirely, at least for household and cosmetic products testing, is that correct?

- Q. Certainly with respect to household and cosmetic products, yes, I agree.
- Q. And yet there are -- you would concede that there are companies, institutions, which actually perform a Draize test and an L.D. 50 test for household and cosmetic products?
 - A. Yes.

- Q. And then you would also agree with Dr. Heller that these companies and institutions which are performing this test are simply wasting their money?
 - A. Oh, they are probably making a lot of money.
- Q. Yet they could make more simply by cutting those costs. I mean, if these tests are invalid and non-effective and apparently costly and have absolutely no utility, provide no useful information, are not valid for clinical purposes, treatment purposes, why do they do it? Why do they waste all that money?
- A. I'm not saying that they don't provide appropriate data. What I'm saying is that there are non-animal tests which can provide similar data.

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- Q. So that in fact you would not agree with Dr. Heller and maybe you'd retract your statement before that these tests are not useful per se and in fact they do provide useful information, is that correct?
- A. It's a question of how useful it is compared with what's being done and what's going on. I'm sure there must be some useful information that comes out of these tests, but I'm not aware of any information along those lines which cannot be reliably duplicated by non-animal tests, and that is my point here.
- Q. Okay. And then we get really down to a philosophical question and the tone of this legislation, because this is, I think, by your own -- the admission that these tests are useful and that they provide appropriate data, now we're talking about a philosophical question: Should we test animals? And the argument that I would make, and maybe you can respond to it, is that so long as the treatment of animals is not done for a sadistic purpose, that is, merely to inflict pain, if it is done, if a test or experiment is performed in order to accumulate useful information, that is a legitimate purpose and a legitimate function. You simply are quibbling over how they acquire that information and, you know, and if there's a less costly or a more effective test or experiment, maybe my Republican friends on the

committee can help me out with the economics. It seems to me that the market theory would state that some company is going to use the less costly method and get a competitive advantage and make more money and drive other people out of business. Eventually, if we let the free market run its course, then we're going to eliminate these tests that you say are unnecessary or less effective?

- A. You want me to respond to that?
- Q. If you can.

A. I don't think I'll have any trouble.

Basically, these tests may provide useful results. It just is incomprehensible to me how everybody can't understand the fact that you can get the same results from a non-animal test that is just as reliable, why should you do it to animals? If you can't get the same results, that's another story. But there are reliable and responsible non-animal tests that can produce the same results. We're not saying that these tests produce results which are unnecessary or non-useful, although many of them do. I'm sure you're aware of the fact, and having done research I know it myself, and having done animal research I know it myself, that there's a great deal of duplication that goes on in laboratories, and I am not here to insinuate that the people who use animals in laboratories are doing so to get their kicks or

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1	are doing so because they can't think of anything else to
2	do. What I'm saying is that the people who are using
3	animals should use animals if there is no viable
4	alternative, if they are not duplicating results that are
5	done somewhere else, and as long as they can't get the
6	same results out of either a non-animal test or using a
7	lower order animal. I see no reason to use animals for
8	tests where you can use non-animal tests which can produce
9	the same results. I can't see why everybody in the world
10	doesn't feel the same way. That just makes common sense.
11	Q. If I could just ask one final question
12	briefly. Why do we discriminate between higher order
13	animals and lower order animals, vertebrates and
14	invertebrates?

A. Well, to my knowledge, things such as worms have a much higher tolerance for pain and indeed feel no pain if you cut them in half. If you cut a rabbit in half, it hurts.

ACTING CHAIRMAN MOEHLMANN: Chris, here comes some help with the economics.

Representative Reber.

REPRESENTATIVE REBER: Thank you, Mr.

Chairman.

I'd be glad to help the Representative out with more than just economics.

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1	BY REPRESENTATIVE REBER: (Of Dr. Kraushar)
2	Q. Doctor, the student at your alma mater,
3	Tufts, during his matriculation, when's the first time
4	he's going to drop a scalpel on a living organism, if he's
5	been working on models?
6	A. You mean a living organism or a human being?
7	Q. Let's start with a living organism.
8	A. Well, let me put it this way, the first time
9	I dropped a scalpel on a human body was my first day in
10	medical school.
11	Q. Okay, I understand what you did, but they
12	didn't have the model syndrome in effect at that time.
13	A. Oh, yes they did.
14	Q. Were they using that exclusively?
15	A. You're missing let me just finish. The
16	first day I dropped a scalpel on a human body was my first
17	day in medical school when we began to dissect a cadaver.
18	Q. That's not a living.
19	A. What's the difference? It's the same thing.
20	It's a human body.
21	REPRESENTATIVE REBER: I rest my case, Mr.
22	Chairman. I have no further questions.

ACTING CHAIRMAN MOEHLMANN: The difference was that you asked the question as you asked it.

Does anyone else have any--

DR. KRAUSHAR: Pardon me, but I would like to respond to that, if I may.

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The difference is that I, when I go to medical school, I'm not training to be a grasshopper doctor, I'm not training to be a frog doctor, I'm training to be a human physician, and when I dissect a human cadaver, it's the same thing as far as touch of tissues, feeling sensation and getting experience as it is to dissect a human body when they are alive.

REPRESENTATIVE REBER: Doctor, with all due respect, I, as a patient, would prefer to have the psychic mentality existing in the doctor that is performing that operation on me to know that he has already had the opportunity to emotionally, psychologically, et cetera, et cetera, and I'm not a medical doctor, I don't know the terminology, but I think we all get the point. There just seems to me to be somewhere along the line where there has to be that nexus between the individual who is performing something knowing that he is performing something on something other than a cadaver, and it's to that extent that I feel some of the implications in this legislation, not necessarily the prohibited test sections relating to cosmetics or households, but sitting here listening to the testimony as it was given to Representative Bortner during his questioning of you, and some of the other witnesses in the way this is going, it's beginning to shock my sense of consideration as to where this may ultimately lead. Maybe not where it's at right now, but where it's going to go. And it's that kind of thought that I think we have to, from our perspective sitting up here, consider, and that's the only reason I ask the question. And I do apologize. I didn't mean to be curt with you in regard to your response initially as to the living organism.

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DR. KRAUSHAR: Let me explain to you that when a medical student or a doctor in training is first given a scalpel to use on a living human body, he does not start out with brain surgery. When he does this, this is done in a very gradual manner, after observing literally hundreds of operations at which he has assisted, and you are worked into this little by little. And usually, to anyone who is acquiring skills in surgery, by the time you get to do your first operation, it's not that you sleep all night thinking, "Oh, my gosh, I've never done this before. I wonder how nervous I'll be, what kind of a job I will do." Basically, anybody who is worth anything, by the time that day comes, his attitude is, well, it's finally here. This is what I've been waiting all my life for to do. And by that time you have been cutting sutures, wiping blood, retracting, doing all kinds of things, and the small, little basic things that you are

1	given in the very beginning are things which do not
2	require great degrees of skill. You just don't walk in
3	some day from medical school and you're given a knife and
4	say, here, operate on this man's brain, or something like
5	that. So I hope you will feel better, God forbid if you
6	should need surgery some day, that the doctor who is
7	operating on you, if it may be his first case in private
8	practice, that you're not the first living thing he's
9	touched with his scalpel.
10	REPRESENTATIVE REBER: I'll just have to
11	check his diploma to see is if it's from Tufts or not.
12	DR. KRAUSHAR: I hope you're fortunate that
13	it is.
14	ACTING CHAIRMAN MOEHLMANN: Thank you, Dr.
15	Kraushar. That concludes the questioning.
16	REPRESENTATIVE McHALE: Mr. Chairman?
17	ACTING CHAIRMAN MOEHLMANN: I beg your
18	pardon, Paul.
19	Representative McHale.
20	REPRESENTATIVE McHALE: Thank you, Mr.
21	Chairman.
22	BY REPRESENTATIVE McHALE: (Of Dr. Kraushar)
23	Q. Doctor, do all cosmetic manufacturers use
24	the Draize eye test or the L.D. 50 test?
25	A. I haven't any idea. Dr. Barnard will

probably be able to give you more information on that.

Oh, excuse me, I can tell you. Absolutely not. Avon,
which is probably, to my knowledge, the largest producer
of cosmetics in the United States, has given the test up
and they no longer use it.

- Q. Doctor, the last hearing that we had in Pittsburgh, if I recall the testimony correctly, and I don't recall the name of the witness who provided it, at least one individual testified that L'Oreal no longer uses these kinds of tests.
 - A. It's possible. I don't know about that.
- Q. I'll save those questions for perhaps some other witnesses who might appear later.

We also heard testimony at that last hearing, and I guess I'm asking you to confirm it if in fact you're familiar with this subject area, that much of this testing is done not for purposes of accumulating data related to human safety in an affirmative sense, but rather that much of this data was compiled using the Draize test and the L.D. 50 test solely for purposes of providing a defense by the cosmetic manufacturer in a subsequent products liability suit, and from a moral standpoint, I see two very different perspectives on that. Are you familiar with that at all?

A. I mentioned that prior in my introduction.

I certainly understand cosmetic companies wanting to protect themselves with respect to products liability, and think they should, and I think you can help with them with that because at this point all I have to say is, well, we can use the Draize test because it's been around for 40 years and it's better than nothing. If you can give them, by your law in Pennsylvania, a reason not to do the Draize test so that if there is a question of product liability and somebody who is suing them says, well, you didn't use the Draize test, and they can say, well, we can't use the Draize test but we're using so-and-so because the Draize test is prohibited by law, you have given them that protection against product liability lawsuit.

- Q. Well, perhaps some of the other witnesses will be able to comment on that.
 - A. Maybe.

Q. I think Representative McNally raised a good point, and that is if the data is valid, why not collect it? Your rebuttal I think is equally valid, and that is, if we can find a way to do this without harming animals while simultaneously compiling equally valid data, why not take the more humane approach? As a corollary to that, we ought to recognize, as at least based on the testimony that I've heard previously, much of this testing takes place not for purposes of protecting human beings but

rather to have reams of data in order to provide a defense in a subsequent product liability suit. I think those are distinctions that we ought to be familiar with.

REPRESENTATIVE McHALE: Thank you, Doctor.
Thank you, Mr. Chairman.

ACTING CHAIRMAN MOEHLMANN: Thank you, Dr. Kraushar. Appreciate your having taken the time and come the distance that you have to appear before us.

Dr. Robert Gordon.

DR. GORDON: I'm Dr. Robert Gordon,
Associate Professor of Surgery at the University of
Pittsburgh, and a senior transplant surgeon at the
University of Pittsburgh Health Center Hospitals. I'm
also a member of the Institutional Review Board of
Presbyterian University Hospital. The IRB reviews and
approves all hospital research projects involving human
subjects, and one of the criteria in which the IRB relies
most heavily upon is the prior demonstration in animal
models of the safety and efficacy of proposed methods
before human use is attempted.

I'm going to read into the record some remarks which I have prepared with Dr. Thomas Starzel, the Chief of Transplantation at the University of Pittsburgh. I'd also like to say that I'm here today at the invitation of the University Administration, who asked Dr. Starzel to

appear before you today but unfortunately he could not be here because he's in Europe speaking at a congress.

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In looking at some of the animal rights literature and some of the motivation for recent legislation, it seems to me that there are three underlying themes, and I've heard these repeated over and over, both in the testimony from witnesses on both sides of the question as well as from your own questions this morning, and they are, one, it's fundamentally immoral to use animals in research. We look down our noses at the lower species and we take advantage of them, and I think Representative Murphy has been quite straightforward in saying that that is not his purpose in sponsoring this legislation, and I sense even from the members of the committee who seem favorably disposed of the bill that they also are not supporting this legislation with the viewpoint of banning medical research on animals, and that most of you understand how much medical progress is dependent on that.

The next level to which we move is that whatever is done with animals should be done for a specific purpose, it should be well-thought out, it should have the objectives clearly stated so that we can assess whether or not it's worthwhile taking advantage of another species for our own benefit. This is a more difficult

area. And the third level is, there's a better way. We don't need to use the animals.

Level one is not an issue today, but as one of the Representatives stressed, he's concerned that it might become an issue if this legislation passes and the animals rights people get their foot in the door, what will come next? Because the ultimate agenda is to stop animal research. And if we do that, we're going to potentially arrest medical research in the United States. And I acknowledge that this legislation will not do that. That is not what this legislation is designed to do.

Now, transplantation is a field in which there have been extraordinary advances made public recently, and you're all aware of what's happened with that. And it may seem at times that this has been sudden, but in fact it's not sudden at all. It's occurred over a 30-year period of painstaking research, almost all of which was done on animals. I think it fair to say that I would not be a transplant surgeon were it not for animal research because there would be no organ transplantation.

All of the surgical techniques that we use in liver transplant today, which is my special area of interest, were developed in the animal laboratory. The venous bypass pump that is now routinely used for liver transplantation and it has enabled us to make the

operation available to many more high risk patients than we were in the past was all worked out in the animal laboratory before it could be safely applied to patients.

The methods of organ preservation that we now have that have extended our preservation time for livers from only six hours to better than a day were all developed and tested in animal models both at the test level and at the whole animal model.

Immunology, the immune system discipline that is the science that is the basis not only for transplantation but much of contemporary cancer research, is highly dependent on animal research, and I'm sure you know this. Most of the Nobel prizes that have been awarded in biology and medicine in the last 30 years were related to animal research, and certainly all the prizes in immunology are based on fundamental research with invertebrate animal strains where conditions can be studied that are impossible to study in humans, but the principles learned are directly applicable to humans.

I'd like to spend just a few moments to talk about cyclosporine, because in many ways it's an ideal drug to talk about the problems we face. The researchers looking for cyclosporine were looking for an antibiotic. They were not looking for an immunosuppresant drug. And had they not tested this drug in animal models looking for

various effects of the drug, they would have missed what is essentially a modern miracle drug, much like penicillin was. So it disappointed them in one regard, but because they were persistent and tested it in a variety of models, they discovered another even more beneficial effect.

Furthermore, cyclosporine, like most drugs, is far from perfect. It's full of toxic effects, and its toxic effects do differ in different animals, but as we moved up and learned to use the drug in animals and eventually moved into higher species and humans, we've learned how to avoid some of the dangerous effects this drug can have in humans.

The doctor who testified at the beginning stated that thalidomide wasn't prevented by animal research, but how many thalidomides have been prevented by animal research? That's the real question. Sure, one or two slipped through. Nothing is perfect. She said she doesn't worry about how many rats died, she worries about what it does in the patients. She's lucky. Because some rats died, she's not having to use a lot of things that might hurt her patients. That's the point. I do worry about when the rats die, and so does the FDA, who wouldn't allow cyclamate on the market because it caused cancer in rats.

The discovery of cyclosporine, like

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penicillin, demonstrates that science is not as well
planned as we would like it to be and never will be. It's
a very delicate balance between what we think of as
deliberate pursuit of knowledge and serendipitous
observation that comes from having asked another
intelligent question and getting a surprising answer.

Many of the discoveries for which the Nobel prize have
been awarded are intelligent accidents.

Animal rights activists demand that we predict what the results of our investigations are going to be, and we try to do that. We have to justify them to get funding, but we don't always know, and some of the most stunning advances in basic animal research have been applicable for human benefits in ways that none of us envisioned during the initial studies. I think you have to remember the unpredictability of scientific research. It's a very important part of the scientific method.

You can see from just these few examples that there's virtually no aspect of transplantation that has not depended for it's development on animal research, and we can go on through the whole litany and I won't bore you with that. You know about all the things that have come about from animal research. Some of them have been cited by other people.

Given the recommended changes in human

lifestyle that we think about today - don't smoke, eat in moderation, exercise, avoid excessive use of alcohol - many of these principles were demonstrated to be valid in animal models where the conditions could be controlled and these factors could be identified.

My concern with the legislation really concerns two provisions. I'm sympathetic to the viewpoint that a school child should not be forced to dissect a frog if he doesn't want to. I agree with the people over there who think not only is it victimization of the frog, it's victimization of the kid, and that bothers me.

I agree with the doctor that most people who get to medical school aren't going to be too concerned about dissecting a cadaver, although I have to tell you what my very first day in medical school involved. I stood before the cadaver, not too thrilled to be there but willing to go through it. My lab partner showed up, shook my hand and said he was leaving to go to Columbia Law School because he didn't want to go through it, and that's what he did.

REPRESENTATIVE REBER: He specializes in malpractice?

DR. GORDON: Hopefully on our side.

My concern is that the legislation proposing to establish executive authority to build regulations and

set up State inspections and everything not only is duplicative of Federal efforts at the present time which are considerable, and the minimum cost estimates I've seen of the Federal legislation are a billion dollars, and there have been more astronomical estimations, but the Public Health Service says a billion dollars. That, in effect, is a 17-percent cut in available moneys for Federal research at the present time, and at a time when RO 1 grants are being funded at the lowest levels and there are more rejections of good RO 1 grants than ever before, that's a very significant impact. So I don't know what the cost is going to be, which one of the Representatives asked, but let's take 1/50 of \$1 billion, since we are one State. It could be considerable depending upon what the executive branch decides to do when you unleash them.

You said that it wasn't legitimate to ask what the consequences were. Well, I've seen what the consequences were of the Organ Transplant Act. A whole Federal bureaucracy's been set up, years and millions of dollars have been spent and we have yet to demonstrate whether or not that legislation has benefited one single patient. There are enormous consequences to setting up a regulatory agency and a regulatory mechanism both in cost and in the effectiveness with which we have to function

and can function. The paper work and bureaucracy involved today in writing a research grant proposal, the committees that have to approve it, IRBs, animal use, radiation safety, pharmacology, infectious disease, are enormous, and you're proposing now another layer at the State level. Think about it. If it's necessary and you can convince us it's necessary, then you should do it. But I'm not convinced at this point in time this is something you really intend to do.

A lot has been said about the sanctions proposal, and the question is, why should medical research not have this same coverage under the law? Why shouldn't they be subject to this? Everybody else is. Nobody has phrased it the other way. Why would they exempt it? reason is so as not to disrupt a medical research project that might be seeking an extremely valuable answer and be in the process of making that discovery but have their material seized, the project completely disrupted, and the chance to finish the project probably destroyed without any guilt having ever been established. That's the I'm all for having things investigated that need to be investigated, and if somebody is smashing animals' heads open inappropriately, then they deserve to be punished for it. But I also am not foreseeing animal rights activists, the ones especially on the more fringe

elements who will make a great fuss, target some laboratory and have their work subject to search and seizure when it may not at all have been justified. I'm not saying that the people here are necessarily representing that fringe. I'm not accusing Representative Murphy of promoting that sort of thing, but it could happen. You're setting up a mechanism that could become a great tool for harassment. You know about the cases of arson and willful destruction of property that have occurred in laboratories in the United States already. There are fringe elements out there and there are some very vociferous people who will use this as a weapon against research. How you guarantee that legitimate, justifiable, proper research will not be inappropriately disrupted by being subject to this search and seizure, that's the question I ask you to consider.

As far as all these special tests and the cosmetic industry is concerned, that's not my area of expertise. My only concern would be if the FDA said to me, we want an L.D. 50 before you can use cyclosporine in a patient. I'm stuck. I've got to do what the FDA wants or the patient can't get to have the drug. That would be my only concern. Whether or not it's appropriate for mascara, there are other people here who are more qualified to testify about that than I am. It's these two

1	things that bother me in particular - setting up the
2	regulatory mechanism which could be expensive, and even
3	though it's not targeted at what you would consider
4	important, acceptable, justifiable medical research could
5	nevertheless have a significant impact on it.
6	Thank you very much for your attention this
7	morning.
8	ACTING CHAIRMAN MOEHLMANN: Thank you, Dr.
9	Gordon.

Are there questions from the committee?
Representative Bortner.

BY REPRESENTATIVE BORTNER: (Of Dr. Gordon)

Q. Thank you, Dr. Gordon.

Very quickly, Dr. Kraushar, I believe, testified that in his opinion there was very little value in dissecting of animals I think he said for two reasons, one, he is not being trained to be a frog doctor, there is no value in that; and secondly, that there are models available which can give exactly the same effect. Do you agree with that?

A. Not entirely. I don't think it's essential for a high school students to do dissection if they don't want to. I mean, I'm sympathetic to the view of not forcing somebody to do something that might be emotionally traumatic for them, and for children, it's a sensitive

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From the standpoint of a surgeon and watching what's happened to medical training, the reason why the dog surgical laboratories are disappearing is they simply are too expensive. It's one of the most expensive facilities to maintain in a hospital. But the fact is that the average intern coming into a surgical residency program today is grossly underskilled technically compared to what they were 10 years ago, so much to point that we have had to ask them to come to Pittsburgh two to three weeks ahead of time to go through a surgical training course before we can let them in the operating room. can't even tie knots differently. The cadaver is not the same as living tissue. It's not even close. I learned anatomy in the operating room. I would venture to say that I could have actually become a surgeon without ever having touched a cadaver, and my anatomy professor is probably turning over in his grave right now, but I learned anatomy in the living tissue, and the dog laboratory, for me, was much more valuable than the cadaver dissection in terms of seeing, learning, feeling, sensing tissue and how to handle it. The young surgeon coming into training today is grossly underskilled that we are having to put them through an animal experience for a few days to get them at least on a reasonable grounds to

1 start work in the human operating room.

- Q. Would you feel then that this section that permits the refusal to participate is not a particularly important or significant part of this legislation?
- A. I don't object to that legislation as it applies to school children, I don't object to that legislation as it applies to -- I think if somebody has religious grounds for which they don't want to do it, the Constitution covers that, as far as I'm concerned.

 Whether or not you want to reinforce that with a State regulation doesn't really bother me. I don't believe in forcing people to do things they don't want to do. We don't force people to do operations on patients that they don't believe the operation should be indicated for, even if I think it should be. That's not the way medicine works, at least not in our institution. So I don't have a great deal of trouble with that.
 - Q. Okay, thank you very much.

REPRESENTATIVE BORTNER: Thank you, Mr.

Chairman.

ACTING CHAIRMAN MOEHLMANN: Representative McHale.

REPRESENTATIVE McHALE: Thank you, Mr.

Chairman.

BY REPRESENTATIVE McHALE: (Of Dr. Gordon)

Q. Doctor, initially I found myself in agreement with what you were saying. You began your testimony by establishing three criteria that I thought capably laid out the various arguments. You indicated first of all that the issue can be analyzed on the level of the need for and justification of animal testing in general. You quickly said that's not the issue before the committee today, and that Representative Murphy made that quite clear.

You then went on with two other criteria, secondly, the question of a valid purpose for any animal experimentation, and thirdly, you talked about alternatives. Now, those were the three criteria. You then spent almost the entire remainder of your testimony focusing on the first criterion, which by your own admission has nothing to do with the bill in front of us. You spoke at length, and I think articulately, intelligently, regarding the need for animal testing in general. I agree with that, but I don't think that's the issue before us, as you stated at the beginning of your testimony.

What I'd like to do is bring you back to the two remaining criteria which are in fact relevant to what we're doing today. Subsection (d), prohibited tests, has to do with the Draize test and the L.D. 50 test with

- regard to the testing of cosmetics and household products.

 Do you oppose that ban?
 - A. I have no position on that. As I think I stated, my comments were all linked, and those three principles overlap is the problem I have. As I said, I don't have any specific position on that test. That test does not impact on me as a clinician very much. I don't do those tests. Whether or not they are required of me depends upon what the FDA would say to me if I was trying introducing a drug for human use.
 - Q. I think it's fair to say that that provision in subsection (d) is a central provision of the bill.
 - A. Yes, it is.

- Q. And you have no position on it?
- A. Right. On that specific test I don't. If somebody can prove that there's a better way, fine. Then let's do it a better way. My concern about the bill concerns the provisions that deal, as I stated, with setting up a regulatory arm in the executive branch of the State government--
 - Q. And you're opposed to that.
- A. --to regulate research laboratories, at a time when the Federal government is talking about a billion dollars of expense to do that very thing.

 Representative Murphy says he's not targeting the medical

research laboratory, but that part of the legislation could. It depends what the executive branch decides to do once you pass the bill.

- Q. So what you're saying is we should retrain from taking action in the hope that the Federal government will take effective action in the same area?
- A. Correct. And if they don't, you're free to reconsider it, obviously.
- Q. All right, the third provision, and I agree with you, the general provisions regarding animal testing and the search warrant provisions related to that are centrally important to that bill, but I guess the point I'm trying to make is that there are at least two other sections that I consider centrally important, one of them being the L.D. 50 and the Draize test, you have no position on that.
 - A. Right.
- Q. The third section that I think is centrally important has to do with the refusal to participate in experimentation, and you support that provision, if I understand your earlier testimony.
- A. Yeah. I am not for coercion of people, basically, and to me, I don't force medical students to do things that they are morally opposed to doing.
 - Q. All right, then if I understand your

testimony, you're opposed to the provisions that would set up a broad-based regulatory system?

- A. Correct.
- Q. You have no position with regard to the L.D. 50 and the Draize test?
 - A. Correct.
- Q. And you support the right to refuse to participate in experimentation involving animals?
- A. Right. I guess the only concern I would have about that is if you got some student who is really -- or have such an individual who started to objecting to all kinds of willy-nilly silly things. I mean, if somebody doesn't want to do a dissection of a live animal, I don't have a problem with that. I don't think they should be forced to do that. But if they start objecting to drawing blood from the patient, starting IVs, hanging blood in the hospital because it involves a puncture of a blood vessel, then I would start to wonder why this person is in medical school to begin with.
- Q. If we eliminated the broad regulatory provisions in the beginning of the bill and simply had a flat ban on the Draize test, the L.D. 50 test, and we provided the right of conscience to refuse to participate in experimentation, would you oppose the bill?
 - A. No, I personally would not oppose the bill.

Q. All right. The only final and brief comment that I--

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- A. You haven't discussed the sanctions part.
- Q. Admittedly, and I understand to you that is an important sanction.

You made reference to fringe elements with regard to animals rights activists, and clearly there are such elements. I don't believe they are represented here today. I think that the folks today who are supporting this bill are very much mainstreamed. But let me just very briefly comment that I was deeply affected by a film that I saw at the last public hearing of this committee considering the predecessor of this bill when that hearing took place in Pittsburgh not too long ago. I was stunned and sickened by the video tape of what was going on at the University of Pennsylvania. And so what I would point out to you, while agreeing that there are some fringe elements among animals rights activists, there are also radicals and fringe elements who until recently were wearing white coats and unnecessarily smashing animal heads in laboratories and laughing about it. And I say that to you not for dramatic effect. I have seen those films and I've been sickened by them. So as we look to the possibility of extremists, we ought to recognize that that possibility, indeed that reality, has existed on both

sides of this issue.

- A. Well, I'm sure you're right, and I'm sure

 3 if--
 - Q. Have you seen that film, by the way?
 - A. I have not seen that film, but I'm sure if I had I would be equally sickened by it.
 - Q. I would recommend that it be more than a theory for you and that you take the time to view it, because I was aware of it intellectually as well before I saw it. I was, nevertheless, profoundly affected by it once I had an opportunity to view it, and I strongly recommend it to you.
 - A. The question is, though, will the Federal legislation that's on the books and is likely to be on the books provide the weapons necessary to eliminate that sort of thing?
 - O. We don't know.
 - A. We don't know yet.
 - Q. We have a responsibility independent of the Federal government.
 - A. I mean, this is one sensational example. I could have come in here with a movie of something that would, in the words of my 12-year-old son, have grossed you all out, okay? And what you would be watching is a liver transplant of a human being.

- Q. No, no, this is quite different.
- A. I said to you that this is a terrible, sensational thing that should never have happened and apparently they were closed down, which is what should have happened.
- Q. Not at all comparable to a liver transplant. We're not talking about the essential blood that's involved in the dramatic impact of surgery. We were talking about people in this film who were needlessly slaughtering animals at one of the most prestigious educational institutions in the country, let alone this State, who were doing so under the least scientific of circumstances, and literally laughing about it. So all I'm saying to you is as we look to and condemn radicals on one side of the issue, we ought to recognize that radicalism has existed on both sides.

Thank you, Mr. Chairman.

- A. Well, I accept that. I accept that there are individuals on both extremes of the question who go too far.
 - Q. You made a reference to only one side.
- A. And I'm sure that there are examples of abuse, and I would like to see those stopped. But what I am concerned about is establishing a system that will do much more than that, that will really make it difficult to

conduct things that I'm sure that you as an individual really don't want to see impaired. That's what I'm-
Q. I support animal research when it's necessary for human health and safety. I'm not sure that

REPRESENTATIVE McHALE: Thank you, Mr. Chairman.

ACTING CHAIRMAN MOEHLMANN: Representative Veon.

I support animal research when it's to produce a new shade

BY REPRESENTATIVE VEON: (Of Dr. Gordon)

of eyeliner.

- Q. Mr. Chairman, just briefly, Representative McHale, in my opinion, left out one provision that to me is important in the bill, and that's the search warrant provision, and you had touched upon that briefly, and he was listing those things that perhaps you might be willing to agree with and could you support the bill on that basis. If you could just reaffirm your position on search warrants, since it seems that that clearly could have some impact on medical research as much as any other provision in the bill? If you could just clarify that?
- A. Well, I think there was a very good reason why medical research was exempted from that provision, namely not to -- the problem is that once you disrupt an experiment with a search and seizure action, you very

1	likely ruined any chance of recovering that experiment or
2	those materials. And it's fine if you've ruined something
3	that was unjustifiable or was criminal activity or
4	whatever you want to call it, but it's not so fine if in
5	fact somebody has made an accusation that has never been
6	put through to a proper investigation, never been
7	conducted in such a way as to determine whether or not in
8	fact there was anything wrong, but in the process you've
9	destroyed whatever was being done. There's no provision
10	in here for how to protect a legitimate research
11	enterprise from not being totally disrupted and destroyed
12	by the investigative action. That's the problem I have
13	with the provision.
14	Q. I appreciate that. So with that in the
15	bill, you could not support the bill?
16	A. Right.
17	REPRESENTATIVE VEON: Thank you, Mr.
18	Chairman.
19	ACTING CHAIRMAN MOEHLMANN: I believe that
20	is the final question. Thank you very much, Dr. Gordon.
21	We appreciate your taking the time to be here.
22	DR. GORDON: Thank you.
23	ACTING CHAIRMAN MOEHLMANN: Dr. Neal
24	Barnard.

Have I correctly pronounced your name, sir?

DR. BARNARD: Yes, you have. Thank you.

Good afternoon, and thank you for allowing me the opportunity to speak with you today. First of all, my name is Neal Barnard. I'm a physician practicing in Washington, D.C. Although I'm on the teaching faculty at the George Washington University School of Medicine, I am not representing that medical school here. Instead, I am representing a group called the Physicians Committee for Responsible Medicine, which is a nationwide nonprofit group of physicians who are concerned about ethical practices, particularly issues related to animal research.

Let me preface my prepared comments with a few comments that I hope might be helpful with some of the questioning that has gone on this morning. First of all, the training of surgeons. Some of us labor under the fantasy that if you want to do a tonsillectomy on a 6-year-old child, that you have to go into a dog lab and take the tonsils out of a dog and then go back and do it on a baby or a child and then you're safe. Or if you want to take the appendix out of a young adult, that you go take the appendix out of a rabbit or a monkey, then you go into the human laboratory and do it there. This is not the way surgeons are trained.

Surgeons are trained, first of all, one of the big preoccupations of medical students in their

surgical rotations is tying knots. They do this on styrofoam blocks or other synthetics. When they learn to do that, they are often then allowed to sew up in a non-cosmetic area of a person, as I did when I was in medical school. Someone had a minor procedure done to their leg and I was allowed to sew up and my knots were checked, and if I was wrong, they were redone. process of surgical residency, the reason it takes five years and longer is because you are not taking shortcuts through animal labs. You're assisting and observing. You spend hours and hours holding retractors, just doing nothing but watching, and finally you are allowed to assist, and you're really an apprentice. You eventually take over under close supervision. So anyone who tells you that animal labs are the way a surgeon gains competence, that person is misleading you. And I don't care if we're talking about taking the tonsils out of a person or transplanting a heart or doing a coronary artery bypass graft. If you want to make a competent surgeon out of a trainee, you do that in the operating room. Supplementary cadaver labs are often offered. Animal labs are not a part of that training at at least the most sophisticated and prestigious training institutions.

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Let me make another comment. Early in this century, medical training at some institutions was not

something to be proud of. And I'm proud to say that the medical community decided that a culling process was necessary. Those medical schools that were not Class A medical schools ultimately had to go out of business, and I can tell you, there were a number of people who objected to that. But we said, we will have one standard for medical training in this country, and the others will be culled. Medical education has to be standardized.

Now, that's true of medical practice, too.

Medical practice is regulated, and should be. There have
been times in our history where it was not, and I would
argue that it should be regulated strictly.

Human research at one point in this century was not well regulated. That's why black men were allowed to die of syphilis while the white doctors knew that this was going on and did not treat them because they were doing a study. That is why a number of people had sham surgical procedures where no curative procedures were done, they were sewed up and data was gathered. But now it's closely regulated and everyone knows that that was an important move.

Animal research is largely unregulated in this country, and the same culling process that we brought to medical training and to medical practice and to human research has to obtain in animal research. We have to

have a minimal floor of behavior.

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Now, some people will say, well, it's like drunk driving, it's like anything else. You know, some people will misbehave in any system, and I would say that's exactly correct, and those are the individuals we're talking about. Can you imagine if we didn't have laws to deal with drunk drivers? Some people will drive drunk. Let's not have a law. Some people will abuse animals in laboratories. If I, as a citizen, am concerned that an animal has been and is being abused in a laboratory, shall I bring that information to the Animal Liberation Front and say, break in, or shall Pennsylvania decide that I can legally bring that information to a judge, to a law enforcement officer who can consult and get proper -- reach a reasonable decision and issue a search warrant? I think it's precisely because there has been no provision made for that sort of investigation that we see people taking the laws into their own hands, as I would were drunk drivers not taken off the street. I can tell you, I would break the law to stop that person. Why not for any of these other things that we have agreed are egregious?

Do Federal laws take the place of State law?

Certainly not. Someone said, well, we have AWAC and we have ALAS and these other accrediting agencies. Whoever

mentioned that failed to mention to you that most of the laboratories in the United States are not AWAC accredited.

Yes, it's supposed to cover all warm-blooded animals, but when it was written into regulations, and still to this day, it does not cover at least 90 percent of the animals used in research. Laboratories that only use rats, mice, and the other animals that are not covered by the regulations of the Animal Welfare Act do not even have to register with the U.S. Department of Agriculture. They are not subject to inspection. The Office of Technology Assessment in 1986 said, "This frustrates the intent of Congress, but the Federal law has never been upgraded, and State law should be," we should rectify that whole.

Moreover, the inspection system is a joke. The General Accounting Office in 1985 released a report showing that those States with the biggest labs, California is number 1, New York is number 2, they went through a year's worth of records and found that over half the labs in those States had never been inspected, period, during that entire year. Were those animals well-treated? Who knows? There is no study that shows that they are. So the current Federal laws are very minimal. They don't do a good job. A State has to have its own standard, and in my view, the University of Pennsylvania is a great

argument for State regulation, because how embarrassing for Pennsylvania to have this occur here and to have the Secretary of HHS, Margaret Heckler, have to step in and say, you can't regulate it yourself, Pennsylvania; the Federal government is going to do it for you. And it wasn't anyone in Pennsylvania who shut that lab down, it was Margaret Heckler. That should have been able to be resolved quietly on a local level, and this would allow that to occur.

Let me then comment on the Draize test. The Draize test is not a safety test, it is not used as a safety test. When something is dropped into a rabbit's eye and it causes irritation, that does not keep products off the market. It is not a screen in that sense. Take Clairol's products, for example. Go to the store, go to the drugstore and pick up Clairol Loving Care hair color. You will read on the side that if you get this in your eye, it will cause blindness. Blindness. Not eye irritation, not might hurt - blindness. Now, do you think Clairol's Loving Care would pass the Draize test? Certainly not. It would fail. Is it marketed anyway? It certainly is.

The Draize test is part of a labeling provision, it's part of the labeling routine, but it is not a safety test. If you look at Clairol's

semi-permanent hair colors, they are described in the following terms: Three words, "CAUTION, eye irritant."

If you look at the Clairol's bleach powders they state:

"CAUTION, eye irritant. When the bleach powders are mixed with hydrogen peroxide, the mixture may cause severe irritation and possibly permanent eye injury...." Are these legal? Sure.

If you look at Clairol's Metalex hair dye, it is called an eye irritant. The aerosol hairsprays are described as potential eye irritants. All these would fail the Draize and they are all marketed anyway. So anyone who tells you, your children are safer if they get something in their eye because we Draize tested it, is utterly false. The Draize test is not used in that way.

Draize test even used? Well, before we get to that, let me point out that the Draize test, even if it were used as a safety test, is wholly inadequate for the purpose. The Draize test, the definitive study on the Draize test, was published by John H. Draize in 1944, and there's almost nothing that was the state of the art in 1944 that we are still saying we just couldn't do better in 45 years. In 1948, the Draize test was four years old and at about that point the sawdust started falling out of the transmission of the Draize test, so to speak. It was in that year that

histamine was found to pass the Draize test, it doesn't hurt rabbits, but even a very dilute solution can cause irritation in the humane eye. Selenium sulfide caused no reaction in the rabbit test, but in humans it caused irritation and inflammation in the eye. 2.5 percent cresol caused just a mild reaction in rabbits, severely irritating in the human eye. There are certain detergents that are well known and well described in the scientific literature that caused no reaction in the rabbit eye but are extremely damaging to the human eye. A 5-percent soap solution caused no reaction in the rabbit eye but was quite irritating to the human eye.

Why so many difference between test results and clinical experience? The reason is that rabbits are not used because they are a good model of the human eye. The reason that rabbits are used is that they are small, they don't fight back, they have large eyes, and they are easy to work on. The cornea of a rabbit is 30 percent thinner than a human cornea. They have a third eyelid that can sequester compounds that you're testing. They tear in far less volume of tears has produced — the pH of the tears, the acidity is 10 times different than in a human. The reason that rabbits are used, again, is because they are docile, they are easy to manipulate, and they have large eyes. Is that science? No, it's

convenience, but, you know, researchers aren't going to be using Pit Bulls to do their Draize test on. They want an animal that they can handle, that their technician isn't going to get torn up. The Draize test is hardly state of the art science.

Researchers at Carnegie-Mellon stated the following: They reviewed Draize test procedures, they found that not only were the results quite variable from one institution to another, but that some compounds seemed quite irritating in some labs and not very irritating in other labs using precisely the same test, the Draize test, and they stated, and I quote, "It is suggested that the rabbit eye procedure should not be recommended as standard practice in any new regulations."

Okay, alternatives. What are the alternatives, and are they state of the art? Could we move to them now? The answer is, there is no finish line for the validation process. There is no date by which some stamp is put on the Draize test and it's declared obsolete and others are validated. Companies that use these tests have to make their own decisions. Avon has already made its decision. The validation process is over for Avon, and they've accepted a method that's produced by the National Testing Corporation in Palm Springs,

combination of proteins and other ingredients that
simulate the structure of the human eye. When you test an
ingredient on this product, this testing product, if it
causes a cloudiness, then it's likely to be an irritant.

Avon said, fine, no more Draize. That's good enough for

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Noxell, which makes Noxema, Cover Girl, other products, they have accepted a method called the agarose diffusion method. It's a simple test. You take a glass dish, put a layer of cloned cells on it. No animals are killed. A layer of cloned cells, and you put a cushion of agarose, which is a derivative of agar, on top of that, then you put what you're testing on top of that cushion. If the cells are killed, it's an irritant. test is slightly more sensitive than the Draize. In other words, it's slightly more cautious, and Noxell, as I mentioned, has accepted this, so why couldn't other companies come along and do much -- precisely the same thing? The reason that some of them don't is not because they have doctors rushing in and saying, oh, but the Draize is the best. They have teams, rather, of lawyers saying, if you're sued you want to stick to the standard of practice. You'd better be doing what the other companies are doing. And if the company says, yeah, that makes sense, then they continue the Draize test, and 1f,

as Avon did, as Noxell did, as Benaton did, as Elizabeth
Taylor when she marketed her perfume did, they said,
baloney. We don't need the Draize test. And there is
good reason for that, because there have been court
decisions where animal tests did, in fact, not protect the
manufacturer.

There are other methods in Pennsylvania. The chorioallantoic membrane test was developed, as you probably know, by Joseph Leighton and Ruy Tchao. This uses an ordinary chicken egg where you make a window in the shell, remove that piece of the shell and there's a small membrane under the shell that has blood vessels in it and reacts very much like the human eye. And the nice thing about all of these tests is they are so much cheaper than the Draize that you can do them over and over and over and over again, so there is not this problem of interlaboratory disagreement.

Also, at Ohio State, Jerald Silverman recently published on a tetrahymena method, which uses a protozoan, single-celled animal that is quite a good test and also slightly more sensitive than the Draize test.

If these are acceptable to some of the largest manufacturers, why not -- why can't all of the manufacturers go along? And I think ultimately they will. I certainly hope.

My favorite alternative, by the way, to the Draize test is what I call selective validation. We have to notice that this bill is not talking about penicillin, it's not talking about surgical eye drops, it's talking about cosmetics, it's talking about household products. These are things we bring into our home, we buy over the counter, and if a child ingests those or splashes them in the eye, a responsible company doesn't put something in there that the emergency room doctor has never seen before. You rush the child to the emergency room and say, no one ever used this before, it's new, it's only been Draize tested, that's it. And as you know, in the Draize test they don't use antidotes, do they? Good luck, Doc. Can you save my child's vision? The responsible companies say, we are going to use things that if they have to be caustic, at least they'll be things that at least we know what they are, we're familiar with these things. That way you can save a child's vision, you can save a child's life if you need to.

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Let me comment just briefly in finishing about a couple of the other provisions of the bill. The right of the student to refuse. Published in the September 1988 Journal of Medical Education, which is published by the Association of American Medical Colleges, the results of a survey done of every American medical

that use no animals at all in their required curriculum.

Tufts is only one, but there are others. Ohio State,

Michigan State, University of Michigan, University of

Washington, State University of New York at Stony Brook,

and in this State, Hahneman. Hahneman used to have 15 dog

surgeries, today it has zero.

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Are animals needed? Certainly not. what about those schools that think it's a good idea? There are many of those schools that still have an animal lab in physiology, pharmacology, one course or another. There's no uniformity about it, but some of them have some of these labs. At virtually all schools they are In other words, if a student objects, the provision is made for them not to participate. Just as we would never take a medical student and say, this woman wants an abortion and you must do it. Because we recognize that some people will not want to perform an abortion. Some will think that's a good idea, but the point is, you don't force a student to do an abortion. Likewise, if a student says, I object to killing animals needlessly, why should they be forced to? And it's a recognition of this need that Tufts Veterinary School has followed suit and now has precisely such a track. You can be a competent physician without doing that. I should

1	think you should be able to get through college, through
2	high school, through junior high, without having to kill
3	animals. And again, this isn't banning that, it's simply
4	saying that those students who have an objection based on
5	their fundamental beliefs, that that, at least, should be
6	respected.
7	Let me conclude at that point and see what
8	questions there may be, if there are any.
9	(Whereupon, Chairman Caltagirone resumed the
LO	Chair.)
1	CHAIRMAN CALTAGIRONE: Questions from
12	members?
L3	Dave.
4	REPRESENTATIVE HECKLER: Thank you, Mr.
15	Chairman.
L6	Doctor, you have provided further evidence
.7	for my suspicion that lawyers are the root of all evil in
L8	the world.
.9	REPRESENTATIVE McHALE: Thank you,
30	Counselor.
21	REPRESENTATIVE KOSINSKI: I'll sue you for
22	defamation of character.
23	REPRESENTATIVE HECKLER: Well, we'll start
24	with you, Jerry.
25	REPRESENTATIVE HAGARTY: We have seconds

1 | over here.

BY REPRESENTATIVE HECKLER: (Of Dr. Barnard)

- Q. At any event, you obviously testified about this matter on a national basis and are somewhat familiar with this issue nationally. I'm inclined to agree with many of the things you're saying. As I may have indicated in earlier questions, I am very concerned about the search warrant provision.
 - A. Um-hum.
- Q. I have an extensive background in law enforcement and I worked with agents of our local SPCA when I was a prosecutor, very successfully. Are there States in which some appropriate agency, whether that would be the Department of Agriculture or some agency that is going to be able to exercise some judgment, some degree of judgment, as to the medical bona fides of a particular facility or particular procedure are empowered to conduct investigations and in appropriate cases execute search warrants?
- A. In the State of Maryland, a search and seizure was conducted on the Institute for Behavioral Research.
 - Q. Do you know who did that?
 - A. The police did that.
 - Q. Okay.

that the animals were cruelly treated. In fact, that was the case. The animals were cruelly treated. To my knowledge, that's the only search that has ever occurred in the United States. And in fact that was, I think, a case of exactly what you need. You need to have a legal provision whereby that can occur. There was no abuse of the system there. People who were familiar with that case brought their case not, again, to the Animal Liberation front or someone else to go in and steal the animals, but rather to duly empowered authorities who could get appropriate consultations as they saw fit.

I think the question is a good one.

Obviously, if someone is totally in the right and their animals are not being cruelly treated they would not want them to be subject to a seizure unnecessarily. But again, currently, there is no provision whatever whereby one can make that judgment, and this law, as I understand it, would simply allow duly empowered individuals to make that judgment, and I assume that would mean a judge.

Q. Well, you don't know how search warrants are issued and executed in Pennsylvania, and we don't have the time to educate you on that point, but I can assure you that what goes into the -- there is no built-in guarantee of any critical analysis of the factual accuracy of what

goes into the warrant, and in fact the issuing authorities for the vast majority of the search warrants which are issued are not learned in the law. But, again, since lawyers are the root of all evil, that may not mean anything.

- A. Well, if that's so, I hope that some steps are made to rectify that because obviously if someone searches my home without proper cause or any Pennsylvania resident's home without proper cause, I would hope there would be recourse.
- Q. Well, that's it. The remedy is, in most cases, a motion to suppress, and so that the evidence that they've seized, even if they find contraband or evidence of a crime, the evidence is then suppressed and the charges against you end up being dismissed. The difficulty that I experienced particularly where we're talking about medical research facilities is the damage which we've heard, and which it's only common sense and which we certainly heard from other witnesses, the damage that's going to be done in the process.

The other point that as a prosecutor, former prosecutor, what occurs to me is that in the vast majority of cases, let's say I'm convinced that there's a laboratory in my jurisdiction that is doing terrible things, things that are plainly inhumane and things that

once I look into it and talk to qualified experts I'm told can't possibly be justified on any scientific basis. very last resort in building a case is going to be to go in and seize whatever animals are involved. I may very well want to go in and have my people take pictures, I may very well want to go in and have -- what I may very well want to do is subpoena records, subpoena people to testify before the Grand Jury. I may very well want to have some undercover person go in to gather evidence or, more appropriately, simply demand that the lab be inspected by appropriate people.

Again, you're not necessarily the person with whom this will be resolved, but I think it needs to be said that you're right, we shouldn't have people seizing something they believe to be wrong. I didn't have the opportunity to see the film that so affected Representative McHale, but we don't want people being aware of these activities and not having anyplace to go within the criminal justice system. My suspicion is that the criminal justice system, certainly any district attorney who has access to an investigative Grand Jury, could deal with those situations without a search warrant provision.

A. My concern is, having seen that film, and I would recommend that to anyone because that was recent

history in this State. It was a case that was not ignored by people concerned about animals. People who are concerned about the treatment of those animals tried to get duly empowered investigations and inspections of that laboratory, and because there was no provision under the law to allow that, cruelties occurred that if you see that tape, you will be utterly convinced that something has to change. There has to be a provision not for the law to abuse this but for at least a mechanism or duly empowered officials to take action.

What disturbs me, I'm not an attorney, I'm a physician, and what disturbs me is that some physicians would like to be above the law, and I don't believe that that's proper. They would like you to have faith in them almost as sort of deities. I think it's a mistake.

- Q. I'm certainly ascribe to that. Is it your understanding that the situation at the University of Pennsylvania was taken to the district attorney's office in that city before and without any avail?
- A. I'm not sure if it went to the district attorney or not. Others could comment on that, but I do recall that the Humane Society was trying to gain access to do a proper inspection and was not allowed to do so.
 - Q. Thank you.

BY REPRESENTATIVE McNALLY: (Of Dr. Barnard)

1 Q. Doctor, I just have two questions for myself 2 and one for Representative Veon, who had to leave. 3 First of all, you mentioned that I believe 4 Noxell and Avon now use non-animal tests for their 5 products? 6 Α. That is correct. 7 Is that correct? ο. 8 That's correct. Α. 9 You also said that the Draize and L.D. 50 10 tests do not prevent eye irritants from being put on the market, is that correct? 11 12 That's -- a great deal of government data Α. 13 would show that there are eye injuries with products, in 14 spite of the use of these tests. 15 Q. Okay. And so are you now saying that Noxell 16 and Avon do not sell products that irritate the eye or 17 that are toxic? All of their products are non-toxic? I was not intending to say that, no. 18 Α. 19 Q. Okay, so that in fact, the alternative tests 20 are no more effective than the Draize test and L.D. 50 21 test in keeping eye irritants and toxic substances off the 22 market? It was not my intention to imply anything of 23 24 that type. That's correct.

Secondly, you also--

Q.

A. However, I might point out that if a company makes a decision that something that -- all the tests do is they show irritancy or non-irritancy. A company can then decide to market them or not as they see fit.

- Q. Okay. You said that--
- A. Actually, let me modify that, if I could.

 As I mentioned earlier, a couple of these tests are more sensitive than the Draize, so there is some possibility that if a company were interested in marketing safe products, that if they were to make this shift, they would perhaps have a slightly higher standard.
- Q. All right. And so returning again to the Draize and L.D. 50 tests, you mentioned, I think, that these tests are performed, at least in your opinion, because they are hedged against liability in products liability suits, is that correct?
- A. That's an impression on my part. I have often scratched my head wondering why anyone would continue to do this sort of thing that has been so resoundingly criticized in the technical literature, and that's the best explanation that I can come up with
- Q. Well, wouldn't an acquisition of information for the purpose of providing a hedge against liability, isn't that a legitimate function?
 - A. It seems to be one that some of the

1 companies feel is important.

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- Q. Well, in any event--
- A. It's not one that I'm interested in as a physician, no.
- Q. Well, perhaps the shareholders are interested in it.
- A. Well, but that's not a reason for the Draize test.
 - Q. Sure it is.
 - A. That's not a reason to be forced--
- Q. Certainly. So long as a test or an experiment is not performed for an illegitimate purpose, and just an example of an illegitimate purpose is simply a sadistic purpose. If you're doing it to protect yourself against liability, you're doing it to obtain information, to learn, it may be gruesome, an unpleasant thing to do, but that's a legitimate function.
- A. No, I don't believe it is, because first of all, some courts have ruled that just because they did these tests, that does not remove corporate liability.

 Number two, perhaps it's worth saying what an L.D. 50 is. You take a rodent, a dog, a cat, or any other animal and you feed them things that if you but put them on your kitchen floor they wouldn't go nowhere near. They don't naturally want to eat lipstick, Scope mouthwash, Gillette

Liquid Paper correction fluid. And what do you do? 1 2 force feed it to the animal day after day after day. 3 L.D. 50 means "lethal dose 50 percent". The test does not end until half of them are dead. The other half will wish 4 5 that they were dead because they have been force fed a 6 near toxic dose of a household product or a cosmetic. 7 Again, we're not talking about lifesaving drugs. We're 8 talking about commercial products. This test is at its worst when the products are not terribly toxic, say 9 10 mouthwash, because again, the test doesn't end until half of them die. So you force feed larger and larger amounts, 11 12 and at that point they may die for hemorrhage or bloating. 13 It is a revolting test, and any company who says, hey liability reasons, let's poison some dogs, some cats, some 14 rodents, I find that an absolute effrontery of even basic 15 16 ethical principles.

Q. Well, as I say, I think that I would disagree. I think that if you're doing it to acquire information to protect theirself against liability, that's a legitimate function.

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- A. Well, I'm happy that a number of the other companies have disagreed and are moving away from these tests.
- Q. Well, and that's a judgment that they are entitled to make.

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- A. Well, but the citizens of Pennsylvania and the citizens of the United States should be able to say there are some things that are beyond--
- Q. I think there are some citizens here that say that they should be allowed to perform those tests.
- A. Well, I'm sure that those people will say, and rightly, we want cancer research, don't we? We want heart disease research, don't we? We want diabetes research. We want burn research. Happily, none of those are mentioned in this bill.
- Q. Yeah, they are. Not specifically the prohibited tests, but in every other section of the bill they are included.
- A. Well, I imagine that those here advocating for cancer research would say, if some person engaging in cancer research is cruelly treating animals, and there's good evidence of that, shouldn't they be subject to some measure of the law? Currently, they are not, and I'm sure they wouldn't argue against that. At least I would hope not.
- Q. Well, Representative Veon asked me to ask you, he has three letters, one from the U.S. Consumer Products Safety Commission, one from the Department of Health and Human Services, and one from the Environmental Protection Agency. In summary, they all state, at least

with respect to the Draize test, that the Draize test is necessary, that it is valid. In fact, the U.S.

Environmental Protection Agency states, "Although there are non-animal test systems which screen for various aspects of ocular and acute toxicity, none of them has been validated to ensure that it accurately mimics responses in the intact animal."

- A. Do you have the date on that letter, sir?
- Q. Those are all 1988. June 1988, March '88, and I think this one is May 1988.
- A. Well, one of the things that's happened in that intervening 11 months is that Avon has decided that whatever those -- whatever interpretation one might make of those, that they are not legally required to do this test. Likewise, Noxell has done the same. Companies such as Nexxus, which makes hair products in every hair salon, Paul Mitchell, these are widely available and never Draize tested, never L.D. 50 tested, never animal tested in any way, and the reason is this: That all of those letters that you've read, including FDA letters and so forth, some people have chosen to interpret that as requiring these tests. That is an incorrect interpretation. There is no pre-market animal testing required of any cosmetic or household product.

Now, if you are manufacturing an ophthalmic

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1	solution, perhaps, maybe that's a different subject
2	because that's not a household product and that's not a
3	cosmetic. But in that case, the FDA might have a
4	different kind of jurisdiction, different set of
5	regulations. When you're talking about these two areas,
6	there is no pre-market animal testing required, and that's
7	why these companies can do what they're doing. I mean,
8	otherwise, wouldn't Avon, Noxell, Paul Mitchell and all
9	those other companiés been in royal trouble?
10	REPRESENTATIVE McNALLY: Thank you, Mr.
11	Chairman.
12	BY REPRESENTATIVE HAYDEN: (Of Dr. Barnard)
13	Q. Doctor, I'd like to continue our focus on
14	the L.D. 50 test and the Draize eye test. I have
15	reference here in the Federal Register to the classic L.D.
16	50 test, or the classic. Is there any difference between
17	that and just for reference to the L.D. 50 test?

- A. Those could be viewed as synonymous terms.
- Q. Okay. Our bill makes a reference to precluding any eye irritancy test or any acute toxicity tests.
 - A. Yes.

- Q. And if you heard my question to the physician before from New Jersey--
 - A. I did.

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- Q. --are you aware of any other eye irritancy test other than the Draize test which is used for purposes of determining toxicity?
- A. Other eye irritancy tests that might be used, in my judgment, would probably be variants on--
 - Q. Wait a second.
 - A. Well, let me finish--
- Q. I didn't ask in your judgment, I asked if there are any out there which are currently used by anybody in the scientific community.
- I understand your question, and I think to Α. give you a proper response would be as follows: Were this bill to simply ban the Draize test, period, all that a person would have to do is say, well, what's a Draize test? You have to put something in a rabbit's eye and watch it for three days. If it's an irritant, watch it for three weeks and leave it at that. All you do is you change that protocol very slightly and you're not doing the Draize test anymore, are you? You're doing some other eye irritancy test and getting away with really getting around the intent of the law. At least that's my understanding in reading this, that they're trying to say you shouldn't just do that. It's like banning high velocity rifles by banning the M-16. You just switch to the AK-47.

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federally anyway, by the way.

A. But to directly answer your question,

Which is something they are going to do

- A. But to directly answer your question, really, the Draize test is the test that's used, and any other test would be simply a variant of that, to the best of my knowledge.
- Q. But when we refer to the Draize test, we all have a general accepted body of scientific knowledge as to what the Draize test entails. Are there any -- what I mean to ask, and I assume that the Draize test primarily involves rabbits, since the pictures that I've seen from most people, are there other tests involving eye irritancy tests which, through the use of administration of some sort of chemical compound in an eye primarily of any other kind of animal, be it a lower order animals, an intermediate level animal?
- A. Other animals have been used. Draize himself, in his 1944 report, had a picture of several stocks all in a row, three contained rabbits, as I recall, one contained a dog, a puppy, a juvenile dog. Eye irritancy tests have been done on primates as well, particularly monkeys. These, I assume, would also be prohibited under the law. So the other species of which I'm aware of, dogs and monkeys.
 - Q. Your statement that the -- at least this

applies to the FDA -- that the FDA does not require the L.D. 50 test as a determination of toxicity as accurate. In fact, the reference I have in the Federal Register said that in 1985, the agency revoked its only regulatory requirement for the test, eliminating the requirement of the classical L.D. 50 test. So the statement -- there has been a lot of misinformation about the L.D. 50 test, but that is certainly an accurate statement. That is not a prerequisite to marketing a product for FDA approval. I do have a concern that within the same reference to the Federal Register of October 11, 1988, there was a petition filed by the ASPCA and 20 cosponsors. I wonder if your organization was one of the cosponsors of that petition, which asked for a clarification by the FDA as to their specific protocol with respect to the L.D. 50 test, hoping and urging for actually a statement of policy as to what the alternatives that were to be accepted and basically pushing for an elimination of the L.D. 50 test as an accepted test by this particular agency, the FDA?

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A. The FDA was hedging its bets for quite a while saying that obviously it's not a very good test, but they weren't going to specifically make any language about it, and more recently they did give a clarification, but the point here is that I've been concerned about the L.D. 50 beyond just the cosmetic and household product issue.

That's correct. What they're saying is that

The L.D. 50 is a terrible test for drug evaluation. It's almost useless. And unfortunately, the testing procedures for drugs may be different from cosmetics and household products, but for cosmetic and household products only, which is what this bill addresses, no animal tests are required pre-market by FDA or anyone else.

- Q. I think that's accurate to state that, but although the FDA went as far to say that the scientific community agrees that the classical L.D. 50 test is not necessary for determining acute toxicity--
 - A. Right.

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Q. --I also have a letters here from Dr. Gerald Levy, the Professor and Chairman of the Department of Medicine at the University of Pittsburgh, in which he says he shares your concerns about the Draize eye test and the acute toxicity test L.D. 50 which have all been abandoned as relatively useless tests, there seems to be a substantial amount of scientific literature which has rejected the utility, actually, of the L.D. 50 test, yet even with this petition the FDA refused, although you said they hedged and in fact they sat on this petition for two years before they issued this advisory opinion. They still did not ban it as one of the acceptable methods of determining toxicity.

- they don't want it, they're not asking for it, but if you want to run it in Pennsylvania, that's your business.
 - Q. And they said the same thing before the Maryland Governor's Task Force--
 - A. That's correct.

- Q. --to Study Animal Testing in your home State on April 17, 1989, in which they went through the whole realm of alternative types of tests like in vitro tests, some of the other tests that you made reference to, but they still came to the conclusion that as it stands now, many years of further research and broad advances on all fronts of toxicological, medical, and related scientific disciplines will be required to replace animal testing methods with non-animal techniques. So once again, you know, I think we agree that the FDA --the point is where the FDA is?
- A. No, I don't think that -- no, I don't agree with you on that.
- Q. Well, my interpretation of the FDA statement before the Maryland Governor's Task Force a month ago, less than a month ago, and the FDA's position here in the Federal Register was that although the L.D. 50 test is not required, that they will accept L.D. 50 test results for a product which they are trying to get through FDA for marketing purposes. They're not recommending it. They're

not telling you that they're required, but they will accept it.

- Q. Those would not be cosmetics or household products, which is what this bill is limited to. The FDA is the Food and Drug Administration, and the drugs and so forth that they are evaluating may well be L.D. 50. They're not asking you to, but they will accept L.D. 50 data for pharmaceuticals, for drugs. They will.
 - Q. Okay.

- A. And they don't ban this. I don't know if they ban any other animals tests either.
- Q. With respect to the use of all alternative tests, the L.D. 50 tests, are there other toxicity type tests that the alternatives to the L.D. 50 tests out there which involve other animals engaged to try to achieve the same kind of result that the L.D. 50 test talks about?
- A. Any sort of animal is subject to the L.D.

 50. So it's not a question of certain animals used in
 L.D. 50 versus other animal tests. Any species of animals
 would be subject to the L.D. 50.
- Q. You mentioned -- you made reference to the fact of not having the opportunity to have access to medical laboratories, and I think you made a valid point that nobody is above the law, and I think anybody here would want to do that, but I also have a concern about the

way the bill is drafted. There is no requirement that, for instance, a physician or a veterinarian or someone of that kind of medical training be the type of person who is authorized to go and obtain a search warrant, based upon information that that particular qualified individual finds. The fact that the Federate Human Societies of Pennsylvania sent us a letter that said that they're concerned about the bill, though they support the Draize eye test feature and the L.D. 50 feature, their concern is that the majority of human agents appointed by duly incorporated humane societies do not have the scientific expertise required to enforce those changes, and I think those are some of the -- I mean, this is somebody from part of the group which would be expected to help enforce the law if in fact it passed. So would you support a requirement, if in fact this bill, was enacted on the search warrant end that there be some minimum educational requirement similar to the type of the committees that are formed under the Federal law that you have some knowledge about animal research before these people could have access to the search warrant provision in the bill?

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A. I would think some provision of that sort could be written into the regulations that are promulgated. One could say that someone with scientific

1	training had to go in with that team, or whatever. I
2	guess that would be up to the persons writing the
3	regulations and they could take that into account.
4	Q. Thank you, Doctor.
5	CHAIRMAN CALTAGIRONE: Representative
6	McHale.
7	BY REPRESENTATIVE McHALE: (Of Dr. Barnard)
8	Q. Doctor, I think you testified that the
9	Draize test was first developed in 1944?
10	A. It was developed actually considerably
11	earlier than that, but the definitive study was published
12	in that year.
13	Q. When was the L.D. 50 test developed?
14	A. Prior to that. I believe it's a World War I
15	era test.
16	Q. Doctor, one of the previous witnesses
17	testified that he supported animal research because of the
18	advances that such research had produced in the field of
19	liver transplants and immunology. I, too, support that
20	type of research. In your opinion, if we were to ban the
21	Draize test and the L.D. 50 test, both of which are now
22	approximately a half century old, do you think there would
23	be any adverse impact on advances in modern medical

A. No, I can't imagine that it would impact

technology?

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adversely in any way on research.

REPRESENTATIVE McHALE: Thank you, Mr.

3 | Chairman.

CHAIRMAN CALTAGIRONE: I don't think there are any further questions. You can be excused.

Okay, it's been taking a little bit longer than I anticipated. If the members could just restrain themselves a little bit of the questioning, we do have a lot of excellent testimony yet to come and we are very far behind in the schedule of witnesses.

I'd like to call Dr. David Meinster and Arnold Raphaelson next, and if Steve Carroll would also join in in order to speed things up. I'd like to take those three next. And then the next three would be Hazard, Dunayer, and then Stephens. And we'll roll it a little bit like that and then you can all offer your testimony and then open it up for the members to offer questions.

So if Steve Carroll would come up, Dr. David Meinster, and then Arnold Raphaelson. State your name for the record, if you want to go left to right, however you want to start, and make your presentations, and then when you complete, the three of you, then we'll open it up for questions from members.

MR. CARROLL: Okay. We'll start with me, I

guess.

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Yes, my name is Steve Carroll, and I'm the Executive Director of the Incurably Ill for Animal Research. Our membership are people in the country who have major health problems, people who want to get well, want to get on with their lives, and people who hope that medical research will make that possible. I think in respect for the time that we're running over today, I will skip past the first page of my testimony which talks about some of the advances that we've seen in medicine, because I think everybody that's here is aware of that already. Suffice it to say that modern medicine has come a long way in the last 50 to 100 years, but we must not forget that we still have a long way to go. That there still are diseases that need cures and there still are new surgical techniques that need to be discovered, and that there still are new pharmaceutical drugs that need to be developed, and that medical research, about 45 percent of which requires animals, is aggressively working towards reaching those goals.

We also need to be aware that this marvelous progress that we've seen is being threatened by a small and vocal group of people who believe that a rat is a pig is a dog is a boy, that they're all the same. That quote is from Ingrid Newkirk, the National Director of People

for the Ethical Treatment of Animals, or PETA, one of the largest animal rights organizations in this country. And make no mistake about it, there are a lot of people who are very vocal who want to put an end to all animal research.

While there are many of these activists who openly will say that that is their ultimate goal, there are others who realize that they will never get a law passed outlawing the use of animals in research. So they direct their efforts towards making research requiring animals prohibitively expensive, cumbersome, and overly restrictive. And oftentimes, these people hide their true intentions of ending all animal research behind a false facade of animal welfare concern. Now, these people are patient. They're willing to make one small step at a time. There's an old saying that you can start with a 3-foot long tube of salami, but no matter how thinly you cut the slices, if you keep cutting away, eventually it's going to disappear.

The bill that you are considering today is not a thin slice. It would cut away a large chunk of medical research. It would needlessly increase the cost of conducting research, leaving less money to fund productive projects. It would needlessly divert the researchers' time away from the laboratory, and it would

needlessly place a burden on the Commonwealth of Pennsylvania. And it would provide the animal activists with additional means to disrupt research.

because it would affect the medical future of our members throughout the country. Pennsylvania is home of several prestigious research facilities and progressive pharmaceutical companies. When something new is discovered in Pennsylvania, that discovery isn't held within the Commonwealth's boundary. It's shared throughout the world. I have chronic osteomyelitis, and I'm waiting for a more effective treatment, but I don't know where that might come from in the future. It may come from California, Iowa, Florida or Pennsylvania. But I don't want to see Pennsylvania removed from that list of possibilities.

Agriculture to promulgate regulations governing the humane housing, treatment, and care of laboratory animals. These same items are already a part of the Federal Animal Welfare Act. They are already required. You have asked in questions earlier how this would affect, have a negative effect on research. Well, the USDA has already spent four years working on developing these regulations to implement the last amendments to the Animal Welfare

Act, which the wording is almost identical to your bill. During that four years, the research community has had to work very closely with them to make certain that these laws are at least something that can be lived with. And that, in itself, is damaging research. This hearing today in a small way is impeding research because we have doctors and we have researchers that are here today instead of in their labs where they should be. And I think that you also need to ask yourselves if you really want to put your Department of Agriculture through four years of coming up with regulations that are already — that are a duplicate of what is already there in the Federal government.

warrants for alleged violations, and I hope that everybody here really realizes what this could -- what type of a Pandora's box this could open up. Animal activists around the country have repeatedly abused every means possible to disrupt research. They have filed lawsuits in countless States around the country, they have challenged zonings on new research facilities. Now, they've never won these, but they don't need to win to succeed what their ultimate goal is, which is to disrupt research. If they can get institutions and companies to divert money into court costs, if they can get researchers to walk out of their

labs to testify at a hearing, they have succeeded in what they are setting out to do. So you can be assured that if 873 becomes law the way that it is, that there will be some activists that will allege violations almost daily, wreaking havoc among the research community and wasting the Commonwealth's time and resources as well. And here again, the Federal government already has means of protecting laboratory animals. Both the NIH and the USDA already investigate complaints about improper lab animal care.

especially concerned about and wants to see followed through on is prevention on how to prevent diseases and disorders and injuries in this country. Well, one of the provisions in this bill would be very damaging for that, and that is the ban on eye irritancy and toxicity testing, because one of the ways that injuries can be prevented and are prevented in this country is through the information that's learned through product safety testing, so that emergency room physicians know how to treat somebody who comes in with a substance in their eye, so that consumers can make an educated choice when they go to the store by how the product is labeled. They can tell whether it's dangerous or not so that these types of accidents can be prevented.

speak on the scientific worthiness of these tests, but I don't think many of you are scientists either, but I do think that you have a high level of common sense and reasoning, and I tend to think that I do, too. And it sure seems to me that after hearing testimonies from people on both sides of this issue who have said that the non-animal alternatives that are being purported as taking the places of these tests are less expensive, it sure seems to me that profit-oriented companies would try to do whatever they can do to lower their costs, and if they were less expensive and they did offer the same prevention, that they would use it. It also seems to me that it might be very dangerous to the health of members of the Commonwealth and of the whole country to legislatively prohibit certain types of tests.

Now, I'm not a scientist and I really can't

There are several provisions in this bill, other provisions that are also equally damaging, but time is short and there will be others here today that will be addressing these topics in more detail, so I'll pass on them. I simply ask that you carefully think about what many of those provisions could do to medical research if they were abused. I also suggest that you ask yourselves just who would benefit and who would suffer as a result of the passage of this bill. Would the laboratory animals

1 really benefit? No, I don't think so, because the 2 protection that's offered to them under 873 is already 3 there through the Federal government. It's the animal 4 activist who would benefit by the passage of this bill 5 because it would give them additional ways to disrupt 6 research, moving them one step closer to their ultimate 7 goal of stopping all use of animals in medical research. 8 And would it be the research community that would suffer 9 because of this bill? Not really. Researchers, 10 scientists and animal caregivers are going to continue to 11 get paid every week, whether they are filling out forms, 12 whether they are testifying in hearings, or whether they 13 are working in their laboratories. The pharmaceutical and 14 consumer product companies will continue to safety test 15 their products, if not in Pennsylvania then elsewhere, and if it costs more money, they can just pass it on to the 16 17 consumer.

No, it will be the citizens who will be the losers, especially those who have an immediate need for improved medical treatment. We are the losers when the price of drugs raise. We are the losers when the researchers have to spend time away from their lab, and we are the losers when the precious research dollars are needlessly wasted on duplicative layers of regulation.

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I thank you for your time.

CHAIRMAN CALTAGIRONE: Thank you.

DR. RAPHAELSON: Mr. Chairman, I am Arnold Raphaelson. At my left is David Meinster. We have prepared our testimony jointly. We are both professors of economics at Temple University, with particular interests in health economics.

We are here to testify today in part about an economic study that we performed that was sponsored by the Philadelphia Drug Exchange a few years ago. The Drug Exchange membership is composed of the major drug manufacturing and distribution firms in Pennsylvania. But we want to stress that our testimony need not reflect the official views either of the Drug Exchange or of Temple University.

clearly, some members of the Drug Exchange are very much concerned that House Bill 873, if enacted, will cast a shadow over the future of pharmaceutical research in Pennsylvania. If their concerns materialize, it's clear that drug firms could, with relative ease, as was just noted, conduct their research elsewhere.

Research and development are very important for the health care industry. R&D has been responsible, as has been noted here already, for many dramatic advances in therapeutics, and we see this all around us. In 1987, it's estimated that one and a half billion prescriptions

were filled in the United States, and in 1988, about \$8.5 billion in over-the-counter, that is nonprescription products, were credited with saving \$24 billion in physicians' fees and lost work time. All of us are agreed that we want these benefits to continue from the laboratories, and these benefits are more apparent than some of the conditions and the institutions that have provided the discoveries behind them. We should recognize that it is possible if we don't see to that environment that we could lose them from Pennsylvania. And we often assume that the big advances in medicine come from distant nonprofit institutions, but the truth is that most new drugs come from drug companies, and Pennsylvania is very important in this field.

In the Federal publication <u>U.S. Industrial</u>

<u>Outlook, 1989</u>, the U.S. drug industry, as a whole, is cited as having about \$50 billion in worldwide sales, including exports and products made abroad. There was a favorable international trade balance, one of the few for the United States, with \$3.79 billion in exports and \$3.65 billion in imports, despite the fact that there is an estimated \$2 billion loss to patent pirates.

That publication cited several factors as important to the prosperity of the industry, including its contributions to meeting national health goals, especially

with an aging population that has growing health needs.

And crucial also is the number of new products developed.

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The publication cites four questions that are said to guide the industry spending for research and development. First is, will the new product satisfy a medical need? Second is, does the industry have the competence to develop the product within a reasonable length of time? Third is, will the product bring about a significant therapeutic improvement? And fourth, will the demand justify the expenditure? Well, the industry's responses to those questions are measured by the total spending of about \$6 billion on research and development in 1988. \$5 billion of it spent in this country, a billion dollars spent abroad. In 1987, 16 of the 21 new drugs approved by the U.S. Food and Drug Administration were developed in the United States, and the Outlook publication goes on to say, quote, "New drugs can only be developed if the R&D development is economically and politically friendly and if there is some relief from litigation once the new drug has been placed on the market," closed quote.

The costs of R&D and the liability insurance are very high. Competitive pressures have increased as patents have expired and generics and nonprescription drug sales have grown. As a result, some firms have stopped

developing and producing things like vaccines and other high risk products. It's clear, just as the Eastman Kodak-Sterling decision was to move to Pennsylvania from New York State for a favorable research environment, it can be moved from Pennsylvania to other States or to foreign nations if that environment in Pennsylvania is perceived as deteriorating.

Pennsylvanians may not fully appreciate how much medical progress has been brought to life by members of the Philadelphia Drug Exchange, by firms in the Commonwealth. We know many of the major advances have occurred and many of those have occurred within 100 miles of Harrisburg in the research laboratories of less than a dozen firms in the area. A few years ago, the two of us, along with Erwin Blackstone, a third college in the economics department at Temple, developed an economic impact analysis relating the pharmaceutical industry, the Philadelphia Drug Exchange, to the Pennsylvania economy, and we produced a booklet of our findings. Dr. Meinster will highlight some of those findings.

DR. MEINSTER: Very briefly, we found out in almost every measure that Pennsylvania's drug industry was growing in sales, in payroll, in capital expenditures and in spending for research and development, and this was during a period that much of Pennsylvania's basic industry

was in decline, with the resulting loss of people and revenue.

Federal data show that during the period 1977 to 1982 that Pennsylvania-based drug industry sales rose by 72 percent, which was about three times the rate of Pennsylvania industry manufacturing and was even higher than that of the rate for the drug industry nationally. The drug industry is one of the fastest growing of American industries, and Pennsylvania drug firms are among its leaders.

In the same period, the drug industry's role as a manufacturing employer grew in Pennsylvania in percentage terms.

While capital investment in Pennsylvania grew about 50 percent between 1977 and 1982, drug companies' capital expenditures rose about 300 percent. This rate of increase in Pennsylvania was 2 1/2 times the rate for the industry nationally, and six times the rate of increase in capital spending for all Pennsylvania manufacturers.

While Pennsylvania's dollar payroll in total manufacturing rose about 30 percent during the '77 to '82 period, the Pennsylvania payroll in drug manufacturing rose 45 percent. It should be borne in mind that the importance of the drug industry to Pennsylvania is

understated by manufacturing employment and payroll data. The industry's ability to sustain employment during the 1981-83 recession is a case in point. In that period, employment in the drug industry declined at a lower rate and its sales in payrolls actually rose. By the end of 1983, Pennsylvania's drug industry sales at about \$3 1/2 billion represented almost 1 dollar in 11 of the State's manufacturers.

In addition to the government data, we surveyed eight drug manufacturing firms in Pennsylvania. These firms contributed about \$23.5 million in State and local taxes in 1983. In addition, the industry's employees paid about \$22 million in State and local income taxes.

These firms increased research and development spending to about \$333 million in 1983.

The drug industry is renown for its support of community and educational organizations in Pennsylvania. Our survey found that they contributed about \$1.2 million to colleges and universities in 1983, the last year that we had the figures for, and about \$11 million to other institutions.

Much of these data will be updated as new census information becomes available. We have obtained some recent information on Pennsylvania firms' research

and development expenditures of possible interest to the committee. For 1988, the six major firms operating in Pennsylvania spent more than \$2.2 billion on research and development. Sterling Drug Division of Eastman Kodak may add \$150 million or more annually as its research and development operations transfer to the Delaware Valley from New York State over the next several years.

Clearly, the pharmaceutical industry is a powerful economic, social, and cultural presence in Pennsylvania. We feel sure that in considering any legislation regulating that industry that you will recognize the effects on that industry's ability to continue and to expand its contributions to our economy.

Thank you.

CHAIRMAN CALTAGIRONE: Thank you.

Members.

observation, I'm sorry, for Mr. Carroll. I have some direct — there are family experiences which lead me to be very favorably inclined toward some of your arguments, but I would suggest to you that the camel's nose in the door of the tent argument which we hear, whether it's from the National Rifle Association who is convinced — that while you're smiling and nodding and I'm saying that I don't buy it, and I don't think that this legislature should make

decisions on legislation on that basis. I think it's our responsibility to review each piece of legislation on it's own merits. I'm also not commenting on what I think the merits of this legislation are, but I just want to make the observation that I think that it's very important that we look at the virtues or lack thereof of this legislation and not say, let's stay out of this area because if we outlaw Draize and L.D. 50 today, tomorrow we're going to be turning the research labs over to the folks who believe in animal rights. I don't think this debate is well-served by taking that point of view.

MR. CARROLL: Well, I would agree with you, but that wasn't actually the point of view that I was trying to put across, and if I did, I'm sorry. What I was trying to say is that there are areas in this specific piece of legislation that could be abused and that you do have the responsibility to look at that possibility, and that's what I was trying to address, not necessarily the fact that they could or would come back tomorrow. I didn't mean to get into that at all.

REPRESENTATIVE McNALLY: I'd like to address a question to the economists, the two gentlemen that did the study.

We've heard some conflicting testimony today, or what appears to be conflicting testimony, from

the proponents of this legislation as to the utility of the L.D. 50 and Draize tests. Two, I think, witnesses said that they thought that the L.D. 50 and Draize tests had little or absolutely no utility whatsoever. Assuming that they are correct and if Draize and L.D. 50 tests are simply a waste of money, offering no benefits, could you tell us how much money the pharmaceutical and household and cosmetic manufacturers in this country or State spend on specifically the Draize and L.D. 50 tests?

DR. RAPHAELSON: No. We have no information on the amount of spending on those particular tests. If we assume, as you've asked us to, that the tests serve no purpose to them at all, we have the feeling that perhaps with some lag of ongoing programs that they would be discarded. The amount spent on these tests we have no specific knowledge of. We have some global data with respect to the firms that are Federal data and we have our survey data which indicate amounts for R&D in general but not for specific purposes.

DR. MEINSTER: I would like to reiterate a point that you made earlier, and that is that these firms are all in competition with each other, and if firms were spending excess amounts on these kinds of research, it would affect their profits and clearly they would stop doing it. So I think the market in this kind of a

situation is a very powerful influence. If there were cheaper and just as productive methods of achieving the same results, I think the market would be that they would switch to those tests.

REPRESENTATIVE McNALLY: So I guess, you know, my concluding question would be that would the household and, you know, to the best of your knowledge, would the household and cosmetic industries and pharmaceutical industries be a fairly competitive industry where significant spending on, you know, wasteful experiments would have an impact and might be felt in the marketplace?

pharmaceutical industry would be regarded largely as an allogopoly where there are several large firms rather than as anything approaching the model of perfect competition. However, the rivalry among those several large firms is quite intense. Many of them are under very similar pressures, including the liability pressures with products and other elements that would lead them to continue the research that would involve some tests. Whether those are not, I have no idea. And the fact is that while they strive to develop new products and get patents on them, they are getting a great deal of pressure from other firms, that is not just the large ones, in the production

1 of generics. I don't think that they are now in the 2 position of high budgets wasting money, and I don't think 3 that they would be spending it if they could not justify 4 such spending. 5 REPRESENTATIVE MCNALLY: Thank you. 6 CHAIRMAN CALTAGIRONE: Any other questions? 7 (No response.) 8 CHAIRMAN CALTAGIRONE: Thank you, gentlemen. 9 I appreciate your testimony. 10 I would like to call next Holly Hazard, Eric Dunayer, Martin Stephens. 11 12 MS. HAZARD: Thank you, Mr. Chairman, and 13 members of the committee. I submitted extensive comments 14 and I just want to, because there have been a number of 15 other people testify before me, touch on a few points that 16 I think have not been made very clearly and hope that you 17 will take the opportunity to read my comments in full if 18 you should need further information. The first point that I want to address on 19 20 this bill, I'm Holly Hazard and I'm the Executive Director 21 of the Doris Day Animal League. We have approximately 30,000 members in Pennsylvania and about 300,000 members 22 23 nationwide. Our organization fully supports the 24 provisions as set forth in the proposed legislation.

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The first area of legislation that I'd like

to discuss briefly is the search warrants provision. And I hesitate to say that I am an attorney. I am not a Pennsylvania attorney and I'm not familiar with your judicial system as it might be different from other States, but I believe that this is an important part of the capability of any State to enforce the provisions under its anti-cruelty statute. If the State's serious about wanting the provisions of anti-cruelty statute to include what goes on in a research laboratory, then one important provision of this would be to allow those individuals charged with that enforcement the opportunity to go in and selze evidence and to investigate claims that there may be some improprieties taking place if an unbiased judicial officer feels that the individual has made a sufficient case so that there are no constitutional questions and so that there are not any violations of someone's civil or constitutional rights taking place.

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There should be, and I would hope that there is in Pennsylvania, sufficient controls under the criminal justice system so that we would not be in a position where an advocate of animal protection who would not have experience and who was not making claims that were legitimate violations of the anti-cruelty statute, not simply someone that didn't like the research that was going on, would be able to go into someone's laboratory

and seizes animals any more than someone should be able to go into my home and seize my animals because they didn't like what I was doing if I was violating the anti-cruelty statute.

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With reference to your concerns that there are things that go on in research laboratories that the layperson may not understand and so therefore may misinterpret as cruelty when cruelty is not actually taking place, certainly people that go in and are in charge with enforcement, are charged with upsetting people's civil liberties and constitutional rights, should be trained and should understand exactly the line that they have to walk to insure that we protect the constitutional rights of individuals, animal researchers and others. I believe that that can be adequately done. It's done in every other area of criminal jurisdiction and criminal procedure, and certainly research laboratories should be no different in trying to control those safequards.

With reference to one of the questions that was asked, this is the last point I want to make on search warrants, I have a letter here that I think was distributed to members of the committee, if not it will be, from Mr. Gary Francione, who is a professor of law at the University of Pennsylvania in which he stated, and I

1 just want to read a couple of sentences, that he was very 2 heavily involved in the efforts to close the now infamous head injury laboratory at the University of Pennsylvania Medical School. As you know, that laboratory was closed 4 by the Public Health Service for violation of various laws and regulations concerning animal treatment and occupational safety. And this is the appropriate part, "On several occasions I spoke to the Philadelphia district 9 attorney's office and tried to get an investigation of the laboratory by local officials. On each occasion I was told the search warrant exemption effectively precluded 12 such an investigation." If an exemption were not in the 1.3 law, perhaps the abuse of animals at the lab could have been stopped years earlier.

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So that was one instance in which we could have stopped all the publicity and quite a bit of the anguish that went on for the animals and for the people involved in that case had there been an opportunity for people to go through the legislative system.

The second point that I want to touch on very briefly has to do with prohibiting the Draize and the L.D. 50 tests for cosmetics and household products. of all, with reference to the testimony that came just before with reference to drug companies in this State and the impact that this legislation may have on them, with

reference to the regulatory requirements that may be set up under this new law, certainly drug companies, if they are using animals, would be affected, but with reference to the Draize and the L.D. 50 test, the provisions of this act and the intent of the act are only to include cosmetics and household products and should have absolutely no impact on the testing of new drugs in this country and in this State.

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The three arguments that you often hear in opposition to prohibiting the Draize and L.D. 50 are that these tests are required under Federal law, they are required for safety and they are required because although alternatives have been developed, they haven't been, quote, "validated," unquote. I think that there's been quite a bit of discussion as to the safety of the Draize and L.D. 50 and also the alternatives available, so I won't get into that much detail. With reference to the Federal law, there are two agencies involved that have jurisdiction, potential jurisdiction, over cosmetics and household products. That's the FDA and the Consumer Products Safety Commission, and several of the committee members have referenced letters from these agencies stating that they support the Draize test and the L.D. 50 tests and they believe that they are safe and effective tests. I would say in response to that that there is no

question that the Federal government encourages these tests, they accept the results of these tests, they do not have a program in place to encourage alternatives, but they do not require these tests. And if we have made an effective case that products can be safely marketed, as they are by over 100 companies in the United States, without doing these tests, then the point that I wish to drive home is that there is no Federal prohibition from a company attempting to use the alternatives to these animal The FDA, in a statement that I think was referenced earlier to a task force studying this problem in Maryland, stated, quote, "Current law administered by the FDA does not require the use of animal tests for cosmetics." The FDA made a further statement in a letter to Congresswoman Barbara Boxer in September of '88 which said not only do they not require the data from this test, but they could not obtain that data if such tests were conducted. The FDA simply does not collect data on pre-market evaluation of cosmetics prior to those products being presented into the stream of commerce.

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The Consumer Products Safety Commission stated in the Federal Register notice as early as 1984 that neither the Federal Hazardous Substances Act, which is the act in their jurisdiction, nor the commission regulations require any firm to perform animal tests.

Again, this is not to say that they don't support these tests but it's simply to say that if the opposition's argument there that they would like to change but they simply can't because the Federal government has them in some kind of a stronghold, this is simply factually incorrect.

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The second safety arguments that industry makes is that there are alternatives to these tests but they have not been validated. Validation, as was mentioned earlier by Dr. Barnard, is not some special analysis that's done simply miraculously and everyone is going to switch. It's a process and it's an evolution towards more technologically advanced methods. The facts are that alternatives to these tests do exist. Several of the associations have gotten together and discussed at least 14 of these alternatives. The problem is that individual companies don't think that enough work has been done, that the test has been repeated enough times so that they feel comfortable with one kind of test or another. There's a very simple solution to feeling uncomfortable with the lack of validation, and that's simply to spend the money on research that they need to spend to repeat There's no mystery to what needs to be done on these alternative procedures, and several companies have done that. Avon, for example, has and they have stated

that they have, quote, "validated" the Eytex system.

There is nothing to stop other companies from spending the money to go ahead and do that.

As far as changing from the alternatives that are available to validated alternatives which would make the companies comfortable in switching, the only problem with switching to these has to do with the lack of commitment on the part of industry. The CTFA, the Cosmetics, Toiletry and Fragrance Association, has stated in the last year they have spent about \$5 million on alternatives at the Johns Hopkins Center and other places, but when you compare this kind of spending to the amount of money that they spend on advertising, for example, Proctor and Gamble last year spent about \$1 billion in advertising, you can see that the amount of money and the effort that they're putting into these alternatives is a pittance.

We believe that the cosmetics and household products firms are disingenuous in saying that they'd like to switch over but that they have don't have the opportunity or that the alternatives are not there. They are there, several firms have switched over. Hundreds of companies in this nation don't use these tests, and the Federal government has not stopped them from manufacturing or from marketing their products.

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Thank you.

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CHAIRMAN CALTAGIRONE: Next.

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MR. DUNAYER: My name is Eric Dunayer. I'm a veterinarian and I work for the Association of Veterinarians for Animal Rights as their Curriculum Modernization Coordinator.

Pennsylvania House Bill No. 873, Section (2)(e), which concerns a student's right to refuse to participate in a vivisection or dissection, holds personal significance for me. I entered the University of Pennsylvania School of Veterinary Medicine because I wanted to pursue a career helping animals. I soon learned, however, that certain requirements of the veterinary school were in conflict with my moral code of not harming or killing animals. Early in my second year I was required to take a course in pharmacology, including an associated laboratory. The laboratory exercises used animals in a manner I considered cruel and unnecessary. One lab consisted of injecting mice with an insecticide and watching how they died. Another used a heart from a freshly killed guinea pig to demonstrate the effect of certain drugs on heart muscle. These labs demonstrated already well-known principles.

A group of us realized that we could not, in good conscience, participate in these laboratories. We

1 went to the instructor to express our misgivings and to 2 work out a mutually acceptable alternative, one that would 3 fulfill the course's educational goals without violating 4 our ethical beliefs. Instead, we were quoted school rules specifying mandatory lab attendance and informed that no 5 6 exceptions were possible because the lab was absolutely 7 essential for the course. Rather than accept the 8 situation, we took our case to administrative officials. 9 After weeks of delay, we were ushered into a meeting with 10 a Robert Marshak, then dean of the school. Again we were quoted school rules, but now the dean added his own 11 personal message. He told us that with our attitudes, we 12 13 did not belong in veterinary school and that he wished he 14 could identify people like us before we got to Penn. 15 Finally, if we refused to attend the lab sessions, we 16 could expect to fail the course. The administration's threats so intimidated most of the students involved that 17 only Gloria Binkowski and I continued to refuse to attend 18 19 the labs. We learned the course material from pharmacology textbooks, took the necessary tests and 20 waited for our grades. Although we hadn't attended the 21 labs, the instructor gave each of us an A for the course 22 23 based on our exams. The following year, the course no 24 longer included any animal lab, nor has it included one since. 25

At the beginning of our third year, Gloria and I were expected to take a required laboratory course consisting of four surgical sessions on two healthy dogs. In the first session, a dog is recovered from anesthesia following surgery. In the second session conducted a week later, the same dog is killed. The third and fourth session repeated the sequence of the first two with a second dog. Again we objected. We felt that it was morally wrong to kill or maim a healthy animal. Gloria and I approached the course instructor and asked to work with him on a mutually acceptable alternative. Our request was summarily dismissed.

We repeatedly appealed our case until we were finally offered a so-called alternative. This consisted of killing four healthy dogs rather than two. These dogs, initially healthy, would be maimed as part of practice surgery, then killed. In addition, we would be expected to monitor other surgically maimed dogs during a short recovery period, after which they, too, would be killed. We were given an ultimatum: Accept this alternative or fail the course and leave veterinary school.

Gloria and I appealed to the president of the University, hoping he would help us settle this matter in a nonadversarial way. Instead, we were both failed,

barred from entering our final year of study, and faced with certain expulsion unless we re-took this course under the same conditions. At this point, our only recourse was to file a lawsuit against the university to preserve our right to complete our studies. After negotiations with the veterinary school, we were allowed to fulfill our surgical requirements with a morally and educationally acceptable alternative. Gloria and I went on to complete our studies and graduate with our class, in my case with high honors. Soon after, we both obtained jobs practicing veterinary medicine.

Unfortunately the resistance Gloria and I encountered is not unique. Other students who have asked for alternatives to animal labs have been threatened with academic penalties. In 1987, a California high school student went to court to preserve her right not to perform dissection. That year, because of her case, the State of California passed legislation to protect high school students who object to classroom vivisection or Currently, a New Jersey high school student dissection. is awaiting the court's decision in a similar case. Some professional and college students are even abandoning their chosen careers because of intransigence of their instructors and school administrators. Several years ago, a veterinary student left the University of Georgia after

the school refused to consider a request for a humane surgical alternative. In 1987, a medical student at the University of Colorado requested an alternative to a dog lab. The instructor threatened to fail her. When a majority of her classmates signed a petition supporting her stance, these students were accused of academic misconduct. Finally, feeling she had no choice, she participated in the laboratory, only to be so demoralized by the experience that she subsequently quit medical school.

What makes such incidents especially sad is that in all instances, humane alternatives were available — alternatives that develop the requisite skills.

Because many students, as well as their instructors, seem unaware of these alternatives, I recently accepted a position as Curriculum Modernization Coordinator with the Association of Veterinarians for Animal Rights. The position involves identifying alternatives to the harmful use of animals in education, in disseminating this information to students and faculty. Literally hundreds of anatomical models, patient simulators, films, videotapes, and computer programs are available that can substitute for animals in teaching laboratories. For example, I recently viewed an excellent videotape on the biology of frogs that can easily replace dissection. All

too often, animal labs continue simply because that's how things have been done in the past. There is mounting evidence that neither dissection nor vivisection is essential to learning.

At the college and professional levels, animal labs are becomming increasingly obsolete. A professor of surgery at the Ohio State University's veterinary school uses a foam rubber pad threaded with slippery red ribbon to teach the hand skills needed in tying off bleeding vessels. Many physiology professors now employ computer simulations that can duplicate cardiovascular, kidney, and other functions. A recent survey conducted by the Physicians Committee for Responsible Medicine shows that almost half of all medical schools now use no animals in their physiology labs. If half of these schools can teach physiology without animal labs, why not the other half?

In addition to being unnecessary to the learning process, animal labs have a negative psychological effect on the students who participate in them. Beginning with high school dissections, these labs desensitize students to animal suffering. The teacher, viewed as an authority figure, seems to be saying it's okay to destroy life. For many students, animal labs are both unsettling and demoralizing.

Students who revere all life deserve support, not censure. I believe that the State of Pennsylvania should protect the rights of students whose ethical beliefs prevent them from inflicting suffering.

I urge you to support a student's right to refuse to participate in vivisection and dissection. I also urge you to support the portion of House Bill 873 that prohibits the use of live animals to test cosmetics or households products.

Last summer, the People for the Ethical
Treatment of Animals asked me to review conditions at one
toxicology lab, Biosearch in Philadelphia. Having worked
for several years in biomedical research, I am familiar
with proper housing conditions. In addition, I have a
Master's degree in industrial hygiene, with heavy emphasis
on toxicology. Even with this background, I was not
prepared for the conditions I found at Biosearch.

Gauze pads to be used had been laid out directly beneath an air vent covered with thick deposits of dust and grease. Animal cages were covered with dry feces and animal hair. Guinea pigs were housed in severely overcrowded conditions. But the chief cause of animal suffering was not the housing conditions but the toxicology tests themselves. Dying rats, subjected to the L.D. 50 tests, lay among already dead cage mates. Many

rabbits being used in the Draize tests were clearly in pain. In each case, one eye was swollen shut and oozing pus. When we approached their cages, the rabbits shrunk back in fear. When we held them to examine their eyes, they thrashed so violently that we were able to only examine one rabbit's eye closely. The membranes around the eye were severely swollen; the cornea had become opaque with a large ulcer. As a veterinarian, I understood that the rabbit had been permanently blinded in that eye.

The tests I saw being carried out at
Biosearch have no valid scientific purpose. The L.D. 50
was originally formulated in 1927 to standardize the
concentrations at which dangerous drugs such as digitalis
or insulin are administered. Today, more modern
techniques such as chromatography are used to establish a
drug's potency. In chromatography, for instance, a
mixture has its chemical ingredients separated out,
usually by machines, so that these ingredients can be
exactly measured. So the original justification for the
L.D. 50 no longer exists. In addition, it was a mistake
to believe that the L.D. 50 test on animals could
accurately predict a chemical's toxicity. Such factors as
the test animal's age, sex, breed, and living conditions
all contribute to wide variation in test results. In any

case, a particular species' reaction to a substance is often completely different from another species' reaction to the same substance, including, of course, that of humans. The L.D. 50 is all but worthless for predicting human reactions to a toxin.

The Draize test also fails to protect human health. As it's been stated many times, the rabbits' eye have different characteristics than human eyes, including a third eyelid, a thinner and larger cornea, and virtually inability to produce tears. This means that in the case of some substances, the rabbits' eyes would react more intensely than a human's, and in other cases it would react less.

The L.D. 50 and the Draize do not protect human health, nor are they required by law for cosmetics and household products. These procedures are performed solely to protect companies from liability. Companies feel they would best protected in the case of a lawsuit if they can say they've been using these procedures that have become standard in the industry. Alternatives do exist. Chemicals can be applied directly to tissue culture to assess the substance toxicity. Computers can predict toxicity based on a chemical's molecular structure. In addition, there is a test tube alternative to the Draize, the Eytex system that Dr. Barnard spoke about. Finally,

companies can use ingredients already known to be safe from years of prior use. Over 100 companies already manufacture their products without animal tests.

I urge you to protect both the American public and helpless animals by banning the L.D. 50 and the Draize. Animal suffering and a false sense of consumer safety are the only legacies of these two tests. As members of the Pennsylvania Assembly, you can set an example for the entire nation by voting against procedures that are wasteful, misleading and enormously cruel.

Thank you.

DR. STEPHENS: Good afternoon. I'm Dr.

Martin Stephens with the Humane Society of the United

States. The Humane Society is the nation's largest animal protection organization, and I'm here today on behalf of our many members in the State of Pennsylvania.

Before I summarize my written comments, I'd like to briefly address a few points that have come up during the course of the hearing. We've heard a lot about duplication with this bill and Federal legislation that already exists. And this pertains mainly to licensing, and I would point out as an aside that licensing is a misnomer. There's registration of facilities, not licensing, which implies some kind of test that needs to be passed before you can be approved and licensed.

There is a difference between simply conducting animal research and having to submit to Federal regulations. There are loopholes in the kinds of facilities that have to comply with Federal laws. For example, research facilities that don't transfer animals in interstate commerce don't necessarily have to register, and there are other loopholes having to do with exclusive use of certain kinds of species, like birds, mice, or rats. If you use too few cats or dogs in the eyes of the USDA, then you may not have to register. If you're a high school, you don't have to register, or if you simply appeal to the USDA and the USDA approves based on various other criteria, you don't have to register. So there would be a need to register at the State level.

There are other provisions that aren't duplicated at the Federal level. For example, the Federal law mandates that a community member must sit on the review board at each facility, but they don't specify any criteria that that person doesn't necessarily have to be with the Humane Society, whereas the State bill does specify that, and that would get around the research facilities who have appointed people to be their animal protection representatives who couldn't care less about animal protection. Those universities and research facilities are inviting trouble, and there may be more

black eyes for the State of Pennsylvania because of that. And, of course, there are other provisions, such as the search warrant provision and the student's right provision and the bans on the L.D. 50 and the Draize that would be new to this bill.

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We've heard a lot about overregulation, the existence of massive Federal regulations, and I, for one, am curious as to why the opponents of this bill fear State knowledge of what's going on in their laboratories. seem to be opposed to the concept of State regulation. They haven't seen the actual regulations yet. They're opposing this bill on principle because they don't want you to know what goes on in their labs. And they're singing the praise of Federal legislation on Capitol Hill that they are vigorously opposing at every step, and now they're threatening lawsuits claiming that the new proposed Federal regulations under the Animal Welfare Act exceeds the statutory authority of the USDA. And now they're decrying the head injury laboratory. Well, where were they several years ago when they were exposed? They were extolling, they were defending the university in many cases, and they point to the NIH as one of the regulators of the Federal government. The Director of NIH praised the head injury laboratory as one of the finest laboratories in the world when there was that expose.

These are the Federal oversight persons that they are pointing to.

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As I mentioned, they haven't seen the regs yet. We don't know what the regs will be under this legislation, if it passes. Let the opponents of this bill come back in several months if this bill passes when the regulations are proposed and let them find specific regulations. Let them see them first before they open their mouth.

And the search warrant. We've heard a lot about the search warrant provisions. There's one important point that hasn't been brought out yet, and that is that if there are regulations because of this bill, those regulations probably will resemble Federal regulations which have to do with things like cage size, feeding the animals, watering the animals, cleaning the cages, et cetera. The Federal legislation has almost nothing to say about the actual conduct of research - what happens to the animal when you put it on the operating table? And I would doubt that the State legislation would have much to say about the actual conduct of research likewise. So that means you don't have to have any tremendous knowledge of animal research to go into a facility with a search warrant and measure cage size, see it built up with feces within a cage, see whether the

animal is so skinny that it apparently hasn't been fed for the last three weeks. You can see those things. I fully support training of the people that go in with search warrants, but you don't necessarily need great scientific knowledge to check on compliance.

Let me briefly turn to my written comments.

I have no intention of reading these or paraphrasing them.

Let me just summarize a few points.

Regarding the search warrant provision, for example. Pennsylvania is like 28 other States that apply their anti-cruelty statutes to research facilities. And I've colored in these 28 States. They are all around the country. There's no specific exemption for research facilities. And I've colored Pennsylvania a different color because apparently Pennsylvania is the only one of those 28 States that don't allow delegated authorities to get search warrants to apply the anti-cruelty statutes to research facilities. And that's an important point.

Pennsylvania wouldn't be sticking its neck out as the only State to allow search warrants for research facilities.

It's been done, and research flourishes in those other States.

With licensing, there are something on the order of 18 other States that have licensing of one form or another of research facilities. Does that mean

research is crippled? No. Pennsylvania is one of only five States, and I've drawn these in here, just five, that has no form of licensing of research facilities.

As to the institutional care and use committees that would be overseeing research at individual facilities, sure, as I said before, there is a Federal mandate for a community member to sit on those review boards. That's one lone voice. Surely, even if that person was a complete anti-vivisectionist, that person would be in no position to stop what went on. But the important point here is that if you appoint a conscientious person to that committee, then that will show the Commonwealth that there is an advocate for the animals on that committee and that the spirit of this mandate for a community member is not being blatantly violated by the institution appointing representatives who couldn't care less about animals to that position, and we have examples of this.

I won't say much about the prohibitions on the L.D. 50 and the Draize test. A lot has already been said. Let me just point out that even the companies that say that they couldn't market new products without animal testing are grossly exaggerating their own internal policies. Avon, for example, who now says that they are not going to do any more animal testing, but when they

percent of their new products are marketed without new animal testing. Okay, were they relying in part on old animal testing? Yes. But fully 95 percent of the new products, and this bill would affect only the new products. It wouldn't require that companies go to the store shelves and pull off all the animal-tested products from the shelves. Just new products. 95 percent of those products go to market without animal testing. The companies are already heading to a point where they are not going to be using animal testing anymore. Maybe that's several years ago.

What we're saying is that this is a political issue, we can do without a new brand of cosmetic, a new brand of cleanser, within those several years while you're trying to validate the alternatives. This is a political issue. We want to put pressure on you to increase the pace of progress, and that's what this bill, that's what this prohibition, is really about, the pace of progress. Industry says to the consumers that write to them to express concerns, yes, we are heading towards the day when we don't use animals in the labs for purposes of testing these products, so they've already agreed with our goal. This is a question of how fast they move that way, and if Pennsylvania passes a prohibition

and if the several other States that are considering this this year pass their prohibitions, that will really light a fire under industry to let them know that we're serious about this.

And finally, on the student's rights provision, a lot of students turn to my organization, the Humane Society of the United States, for counseling on this. They don't want to participate in some of the dissections or in the vivisections, and in our experience, the vast majority of these cases are quietly resolved. The only cases that you hear about in the news are those that lead to confrontation where the schools are adamant in not letting the students do an alternative project. What we're saying is, avoid those confrontational situations, avoid those ugly scenes and the bad publicity and let students not get out of work but do other kinds of work to satisfy those provisions.

Thank you very much.

CHAIRMAN CALTAGIRONE: Members?

Dave.

BY REPRESENTATIVE HECKLER: (Of Ms. Hazard)

- Q. Briefly, Miss Hazard, I assume that you're familiar with the bill?
 - A. Yes.

Q. Can you tell the committee what background

or training is required in Pennsylvania law for an agent of and -- I'm sorry, the correct language, I believe it's a humane society or other similar organization incorporated in the Commonwealth?

- A. I'm not a Pennsylvania attorney and I recall reviewing that last year when we were discussing this bill. I don't remember the specifics. I remember that there's not a lot, if there is any. But I would point out that there would be no more or less for, say, a police officer who might go into a situation in a laboratory who would not be--
- Q. Well, maybe I didn't frame my question correctly. Would you agree that there is no training standard whatsoever for these agents either with regard to the rules of criminal procedure, how they are to execute a search warrant or in fact what they are liable to -- how to interpret what they might find? There's no present standard in law?
- A. I believe that's the case, but as I said,
 I'm not an expert in Pennsylvania law, but they would, of
 course, have to go through some kind of judicial
 proceeding to show that there is probable cause.
 - O. That's correct.
 - A. Yes.
 - Q. Now, the one other question, we've received

some materials, among the body of things that have been submitted by the various interested parties, that indicates that the Maryland case, which the only one I've heard cited where the there was a search warrant executed and I presume some animals seized, but that was thrown out by the Maryland appellate courts on a theory that the State law or State actions had intruded upon Federal

prerogative. Are you familiar with that?

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- Α. I'm familiar with it. Actually, my law partner was the prosecutor in that case, so I hope I can get it correct what the decision of the court was. Dr. Kalb was found guilty at the trial court level. Supreme Court of Maryland found that they did not believe that it was the intent of the legislature to include -- it didn't have anything to do with the Federal law, they didn't believe that it was the intent of the legislature to include research facilities under the State anti-cruelty statute, so it would be a very similar situation here. But I would point out that in the very next session of the legislature, the elected Representatives of that State came back and very strongly turned around any misconceptions that the court might have in that case about that, and now research institutions are very clearly included under that statute.
 - Q. Okay, and are you aware of any case law then

1	nationally that suggests that there is a Federal
2	preemption?
3	A. Not only is there not any Federal
4	preemption, but under the Federal Animal Welfare Act, and
5	I can get you a specific cite, there is a section that
6	says that it is the intent of the Congress to work with
7	States in enacting legislation which would protect animals
8	under this law and not to preempt any State legislation in
9	this area.
10	REPRESENTATIVE HECKLER: Thank you.
11	MS. HAZARD: Thank you.
12	CHAIRMAN CALTAGIRONE: Chris.
13	REPRESENTATIVE McNALLY: A question for Dr.
14	Dunayer.
15	BY REPRESENTATIVE McNALLY: (Of Dr. Dunayer)
16	Q. I had asked this question earlier. Why do
17	we and why aren't we in this legislation to discriminate
18	between vertebrate animal and lower order animals?
19	A. Well, there's a feeling that lower order
20	animals are not capable of feeling pain, are not as
21	sentient, and it's more, I believe, a point of philosophy.
22	I don't see that we should. I mean, that's my personal
23	feeling. I believe that all animals, and I personally in
24	my own life, I don't make that distinction between

vertebrate and non-vertebrate, but I think, you know, as

everyone says, there has to be a point of starting.

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- Q. Well, you know, since we have to draw the line, or perhaps we don't, but if we did, could we draw the line between warm-blooded animals and cold-blooded animals?
- A. No, I don't think -- I know not because you can look at a fish and you can find what would be considered an organized brain in a fish with many of the same types of structures that our brain has that we know are involved with pain, and the same is true all the way up the other cold-blooded animals, such as amphibians and reptiles the same is true. We certainly know it's true in mammals and birds. When you get down to below the level of vertebrate, you don't have that sort of organization where you can point to one structure and say, yeah, this is a brain. But we are finding things, for instance, earthworms were mentioned, and it's been found that earthworms contain a substance called endorphins, which we know in our own brains are used to soothe pain. So there's evidence that maybe even down to the level of an earthworm we're seeing evidence of pain reception and therefore, you know, if you have pain, ways of getting around it. So I don't personally feel it's a clear-cut distinction between vertebrate and non-vertebrate. It's getting hazier all the time.

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Q. Well, now, if pain is the criterion, and perhaps that's really the objection that we have in animal testing is that it causes pain in an animal, would you not have objections to animal dissection and experimentation if, for example, we anesthetize the animal?

Well, I think pain is one criteria, and I Α. think there are other criteria you have to look at. have to look at whether this animal is what we, again, consider conscious. We know that dogs and cats are conscious. We know that they expect to get fed every day, they expect to take their walks. So these are conscious animals who we've grown to understand don't just live to eat or drink or survive. They have other things that they're interested in. I mean, we can't say they have the level of a human being, but they do have a significant interest in what their life is, and to deprive them of their life simply because we think that we can do that does not make it right. And if we base it simply on physical things, then we can also take it without thinking. I believe pain is one criterion, but I also think we have to consider the animal as a whole, as a sentient being, and not just dismiss it because we can say we can take the pain away.

Q. Well, but we're not simply dismissing the animal's life arbitrarily. It seems to me that in every

instance which, you know, which you have proposed to eliminate or regulate these tests, experiments, dissections, are being performed for a purpose which benefits society. That is, to learn more about physiology, anatomy, pharmacology. It's a scientific endeavor, or in the case of a Draize test or L.D. 50 test, as a hedge against liability to promote an economic interest. And, you know, so it seems to me, and I really don't understand why we shouldn't balance those social benefits against the costs that to me you've described.

Α. Well, I believe that when an individual looks at these things, if there are alternatives available, the humane individual chooses the alternatives. The researchers say we don't want to kill animals. people who are doing the Draize and the L.D. 50 say, we don't want to kill animals, we don't want to injure animals. The people who are doing laboratories using animals are saying the same thing, but yet when you present there are alternatives, why doesn't the humane, if they are truly humane, why don't they choose those alternatives? I believe, as I've said and others have said as well, that the Draize test, the L.D. 50 test, and the use of animals in laboratories, the harmful use of animals in teaching laboratories, let me make that clear, can be replaced by alternatives that are humane. Now,

1	some of these are not necessarily non-animal alternatives.
2	Again, I'm going to talk specifically about laboratories
3	in teaching. Some may involve the use of animals, but
4	again, we have to say not in a painful way, not in a way
5	that takes their lives, takes the life of these animals
6	when there are alternatives. That, to a humane
7	individual, I believe, is not proper.
8	CHAIRMAN CALTAGIRONE: Thank you. Thank you
9	for your testimony.
10	I'd like to call next Dr. Keith Booman,
11	Robert Brady, and Dr. Thomas G. Davis.
12	MR. BRADY: Mr. Chairman, my name is Bob
13	Brady, and we've, at least at this side of the table, have
14	decided I will go first because I represent the cosmetic
15	industry, and I suspect the bulk of the questions may be
16	directed towards me. If you prefer a different order
17	CHAIRMAN CALTAGIRONE: Go right ahead.
18	MR. BRADY: Okay. Thank you.
19	To begin with, I have passed out to you
20	copies of not only my testimony but a series of exhibits
21	which I'll refer to during the testimony.
22	As I said, my name is Bob Brady. I'm an
23	attorney from Washington, D.C., with the firm of Patton,
24	Boggs & Blow. Prior to my present position, I was General

Counsel and Executive Vice President of the Cosmetic,

Toiletry and Fragrance Association. Prior to that, from 1975 to 1983, I was an attorney at the Food and Drug Administration and ended my career as Executive Assistant to the Commissioner of Food and Drugs. I might add, for the record, not the present commissioner nor the commissioner that wrote the various letters that we're taking about here.

The Cosmetic, Toiletry and Fragrance
Association is the primary association for the cosmetic
industry. It represents about 250 manufacturers of
finished products and 250 suppliers of packaging,
chemicals, other things that help develop the product. We
represent the vast majority of cosmetics distributed.

I'm going to spare you, obviously, reading my testimony. I had also prepared a summary and I'm going to spare you that. I almost don't quite know where to begin because there were so many questions today directed towards our use of the Draize and the L.D. 50, but let me try to summarize my summary. I've got a few comments to earlier, and then I think the most productive way would be for you to ask questions.

I think there is much in common with everyone in this room, and that is we want safe products.

Dr. Stephens said that that is, quote, "our goal of the Humane Society." Well, I think it's industry's goal as

well. We're human beings. We want safe products for consumers, and we want to do it in a way that is going to minimize the use of animals and minimize the amount of pain that those animals have to go through in order to obtain safety data sufficient to establish that a cosmetic that is going to be marketed nationwide will be safe for all consumers.

Cosmetics are much more, obviously, than mascara. They are shampoo, they are deodorant, they are toothpaste, they are suntan products. Indeed, all of us in this room, or most of us in this room, have used four or five already today. I, myself, washed my hair this morning, I brushed my teeth, I put on deodorant, and although you may not believe it, I shaved. The point I'm trying to make is that they are very useful products. They are not frivolous products. They are clearly not drugs, and I'm not trying to make that point, but I'm trying to make the point that consumers in this country want and deserve a wide array of consumer products, and our industry provides that. Indeed, consumers buy 9 billion units of cosmetic products per year, and we want to make sure they're safe.

I think this issue, albeit it's a political issue, is also a scientific issue, and you legislators have an extremely important task. It's a very emotional

task and it's a very complicated scientific task. As you've heard all kinds of testimony today about alternatives, whether they work, whether they don't work. And while it certainly is political, I think it's got to have a scientific base, and I urge you, while you listen to my testimony, first of all, I'm a lawyer, I am not a scientist. I am not going to give you an opinion as to whether the Draize test works. What I'm going to do is ask you to look at experts who are much more centrally involved with the development of these tests and the assessment of these tests. And while I certainly don't impugn any of the testimony by the people who support this bill, I'm not sure they are in the same position in terms of their expertise as some of the people that I will be referring to today.

As I said, it seems to me there are two primary issues. What constitutes safety? And we've heard a lot of discussion today about what the Federal law does or does not require. The Federal law says that cosmetics will be safe, otherwise the Federal government can seize them, they can enjoin a company or they can prosecute a company should a company distribute across State lines an unsafe cosmetic. That's the same standard for foods, drugs, everything else. The law does not state safety is determined by the following 13 tests, but simply that is

true also for drugs, foods, and everything else. The standard of safety, which I believe, and I haven't checked, is probably the same standard that is in your Pennsylvania Food and Drug Act, because I believe every State has a mini-Food and Drug Act which has comparable provisions, so I suspect that you have a food and drug act here in Pennsylvania that has the same general standard. Well, what do lawyers do and regulators do when they have a general standard? They interpret that and they implement it in a way based on generally recognized principles of scientific standards. And now I'm going to ask you to start looking at what I believe are the appropriate experts on this question.

The first in my exhibits attached to my testimony are four different letters from the present Commissioner of Foods and Drugs, Dr. Frank Young. The letters are -- I'm sorry, there's three letters and a statement. They are in '88. The most recent statement was in March of '89 to the Maryland commission looking at the animal testing issue. Earlier there was a question raised about whether Dr. Young was a Ph.D. or an M.D. and, one, I'm not sure that that's relevant, but, two, he's both. He is an M.D. and a Ph.D. He is also the former dean of a medical school and probably one of the nation's leading medical researchers during his time in medical

school. Dr. Young and the FDA make two points. The first is, in their belief, animal tests, at some point in the process of development of a product, and I'll come back, at some point in the process, animal tests are necessary in order to establish safety in their minds. Second important point that runs through all of those documents, and I urge you to read them carefully because this is an extremely complicated scientific issue, the second point is, is there an alternative today that is an absolute replacement for the Draize test? And they say no.

We've had a lot of talk this morning about various companies who are responsibly trying to meet the concerns of the animal rights movement by trying to move away from animal tests. I think that some of the statements that have been made are not totally complete, and that's another concern I have. There are a lot of generalizations being made about the matter.

The FDA position is that there are a number of screening tests that will allow companies to reduce the number of animals they might need in order to establish safety. Indeed, Noxell has been mentioned here several times as doing away with animal testing. That's simply not true. All their public statements are that their use of a screening method called the agarose diffusion method is meant to reduce their animal testing requirements by

about 80 percent. But it is not a replacement. It is a screening test.

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Another expert that I think you need to look at very carefully, because he's devoted his professional career to this, is Dr. Alan Goldberg, who is head of the Johns Hopkins Center for the Study of Alternatives to Animal Testing. The Johns Hopkins Center was set up in large part by money provided by the soap and detergent industry and the cosmetic industry in 1981. Its goals were to get a basic research to find out and figure out ways to get to alternatives. We would like alternatives as well, we just simply don't think in some instances they're here yet. In many instances we don't need animal testing, and as we've talked about the companies that market products that don't do testing on the finished product. But I dare say that for any responsible company to market a product today, there is some animal testing in the history of the development of those ingredients. It's simply -- and that's the position that the FDA is taking. They're taking the position that you've got to, at some point in the process, do some animal testing. But let me go back to Dr. Goldberg. Dr. Goldberg, who as I said, has spent the last 10 years as virtually the world's leading expert on this subject, has testified and still states that there is simply no test which is yet a total

replacement, a non-animal test which is a total replacement, for the Draize eye test. Is the Draize eye test perfect? Absolutely not. Is it an old test? Yes. Could it be better? Of course. But it's simply at the moment one test which helps provided data to companies to establish the safety of products.

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Second point that Dr. Goldberg makes, and it's in my testimony, is that it would be what I call toxicological malpractice for a scientist to rely totally on non-animal tests at this time. Now, here's a man whose whole career is dedicated to finding these tests. He certainly has no incentive, as it is sometimes implied of the cosmetic industry, not to do these tests. His goal is to find these tests, as is industry's goal. Not only did we fund and fund to a great extent the Johns Hopkins Center a year ago patterning our activity after an earlier program started by the Soap and Detergent Association, we have taken 12 of the leading screening tests, and they are all identified in my testimony and attachments, that companies are using now to reduce the number of animals. We've taken those 12 tests and we've started scientifically validating them. The process of validation so everyone can use that data as it develops will be publicly available so everyone in this room can see it and look at it.

Individual companies, as I said, are making movements as fast as science will allow them to move, and I think that's a very important point — as fast as science will allow them to move they are moving to try to use as few animals as possible. We in the cosmetic industry are human, we also have children, and we don't want to use animals in an unnecessary or painful way, if possible. Are there people out there who do that? Sure. Are there people who don't pay their taxes? Sure. Should you go after tax evadors? Yes. Should you go after people who abuse animals? Of course. But that's not really the issue germane to this debate, in my mind. The issue is, should you legislate the development of science prematurely?

Now, why does the industry do these tests?

As I said, the Draize test is not perfect, but we're moving as rapidly as we can to develop those alternatives, and in the meantime, we want to make sure that not only what you put on your face, your hair, what your wife puts on her face or her hair, or what your children might accidentally thrust in their eye is as safe as it possibly can be. Product misuse in the cosmetic and household product industry is a major concern. We want to make sure that we've got all the data possible when little Johnny accidentally pours my shaving cream in his eye that he

knows that when we call the Poison Control Center, which we will absolutely do, they'll have the best data possible.

Let's turn to the Poison Control Center.

There was testimony earlier today by an extremely well-meaning obstetrician who said she simply doesn't use that data, and she said she's the bottom line, and I'm sure she is for obstetrics and gynecology. I submit to you that the people who are truly the bottom line in terms of accidental exposure, while I'm sure she gets plenty of calls, are the poison control people and the emergency room people. And what do they say about bills like this, not in this State but other States? They absolutely oppose legislating abandonment of the Dralze test at this time. It is a source of data that helps them establish how to respond when a child or anyone has gotten a substance in their eye.

Again, I come back to the point that when you're assessing the science of this issue and the correct medical practice and the correct regulatory stand, you shouldn't rely on me. I'm an industry spokesman. I'm paid by industry. Hopefully, I have an obligation to tell you the truth, but you should rely on the best experts and the most germane experts, and I submit the most germane experts are Food and Drug administration, emergency room

physicians, poison control people, and people whom have devoted their lives to the development and have the incentive to develop non-animal alternatives.

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And with that I'll stop and be glad to answer any questions.

CHAIRMAN CALTAGIRONE: Thank you. I'd like the other gentlemen to testify first.

DR. BOOMAN: Mr. Chairman, members of the committee, my name is Keith Booman. I'm the Technical Director of the Soap and Detergent Association. I am a scientist. I have a Ph.D. in chemistry from California Institute of Technology, 15 years of product development at the Roman Haas Company research division laboratories in Philadelphia, and then 18 years with the Soap and Detergent Association in dealing with research on human safety and environmental aspects of detergents and detergent ingredients. The major responsibility that I have right now is in evaluating non-animal tests for the evaluation of eye irritancy. I'd like to say that the basic reason that our industry is interested in this whole topic is consumer safety, plain and simple. A company that does not have a reputation for safe products, products that are safe enough to use, does not live very long. So it's important for us to be able to evaluate acute toxicity, eye irritancy, and acute ingestion

toxicity reliably.

Our industry is an industry where the products are widespread. Over a million pounds of laundry product is used in this country each year. Thousands of exposures, both with respect to accidental ingestion among children 1 to 5 and accidental splashing of products in the eyes of people who are using them. The bottom line is that over these hundreds of thousands of accidents that occur during the use and storage of these important households products, life threatening events do not occur, and that is solely based on the reliability of the testing that we do. And if you're interested, I can go into greater detail on how these tests are carried out in a scientifically valid way.

As I indicated a moment ago, we are working in a major effort in evaluation of non-animal tests for eye irritancy. At this point in time, there is no alternative that we can use for reliably evaluating acute ingestion toxicity. The tests that we're evaluating, and a number of them have been mentioned today, are ones that scientists agree are not likely to be able to replace the Draize test entirely. They will probably be able to reduce the use, the reliance on animal testing, considerably, but it does not seem possible to think in terms of them eliminating reliance on animal testing. And

I'd like you to know that we are in continual contact with the Federal agency scientists in CPSC, Consumer Products Safety Commission, Food and Drug Administration, Environmental Protection Agency, and as late as last week in reviewing our program with them, the input that I got back was that the input that you have seen in letters from these agencies remains the same today as it was in 1988.

I'd like the committee to know that our industry is doing what I think all of society would hope we would be doing, and that is reducing animal testing as fast as we can. And in point of fact, over the last decade, our industry has been able to reduce reliance on the rabbit testing for eye irritancy by 87 percent and able to reduce the reliance on animal testing in general by 64 percent. But we are not at a point where we can eliminate acute toxicity testing without compromising product safety.

Now, the matter has been raised as to who needs another cleaning product? I'd like to remind Representative Caltagirone and the rest of the committee that this legislature itself is in the process right now of demanding new products from our industry. So one cannot say that there is not a need for new cleaning products. There is a need, you have expressed it, and I can outline for you, if you wish, other areas in which we

are likely to need new products, improved products, in the near future.

With that I would close. We must object to this bill. We must develop reliable acute toxicity information, and we cannot do that without limited animal testing at this point in time, and we do not have the possibility at this point in time of seeing our way clear to testing without animals.

Thank you.

CHAIRMAN CALTAGIRONE: Thank you.

DR. DAVIS: Mr. Chairman and members of the committee, I am Dr. Tom Davis, Vice President for Worldwide Medical Affairs of SmithKline & French Laboratories. I also practice medicine at Presbyterian Hospital, which is part of the University of Pennsylvania Medical Center. Here with me today is Ceil Hedburg, DVM, Ph.D., from McNeil Laboratories; Richard Knauff, DVM, from Wyeth-Ayerst Laboratories; Michael Kastello from Merck was here but had to leave, unfortunately, and as counsel to the Pennsylvania Pharmaceutical firms is Kathy Speaker MacNett, Esquire, from the Harrisburg law firm of Buchanan and Ingersoll.

Mr. Chairman, the pharmaceutical manufacturers of Pennsylvania acknowledge that the sponsors of House Bill 873 are motivated by a concern for

animals. We share those concerns. We believe that research animals must be treated humanely. We believe that research facilities must be staffed by well-trained people, and we further believe that these facilities must be inspected thoroughly and with adequate frequency by competent authorities. But we also believe that the environment in which research and development are conducted must be free of excessive, sometimes redundant, and/or conflicting regulation, and that enforcement of humane animal care and use must remain in the control of competent, professional authorities.

Now, our reading of House Bill 873 convinces us that it would impose excessive, conflicting, and sometimes redundant regulation and thereby cast a shadow over the future of research in our industry. At this point, I would like to just depart from the prepared texts. It's late in the day and I will try to just make a few points that we would like to see emphasized during consideration of this bill.

The first refers to the search and seizure, if I may call it that, and the way we read this bill is that these search warrants may be taken out by people who have no knowledge of the kind of work that goes on in our laboratories. We do not like this approach. We are subject to inspections from the Federal government. Those

people are trained, they come in and they know what they have to look at and they understand what they are looking at. We would object to having people come into our laboratories who do not have that training, and this bill does not specify that they must have that training.

Secondly, the bill includes all vertebrates, and that's been discussed here. There is no way that we can, at this point, do away with experimentation in all vertebrates. We are constantly looking for ways to decrease our reliance on animals, and anyone who says that we are not does not understand what we are about. It's already been mentioned that we are in business to make a profit, and anything that will reduce our costs will help us make a profit. Therefore, we are searching for ways to reduce our reliance on animal experimentation.

The bill, on page 4, line 18, also has a statement that is very disturbing. It is in the definitions section and it defines acute toxicity test as follows: "Any experiment involving the administration to a live animal of a substance to screen for its relative toxicity." Now, that doesn't say anything about cosmetics, it doesn't say anything about household goods, even though the bill is aimed at those items. That is a very, very broad statement. To my way of reading it, it covers all toxicity testing. We cannot exist unless we

are permitted to do the tests that we think are necessary in order to get regulatory approval around the world.

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You've heard a lot about the Draize test and a lot about the L.D. 50s. We all have our opinions on Most of them still use these tests, but them. nonetheless, the important thing to remember is that we are required by law not only in certain statutes here in this country but also by other countries where we market our products, we are required by law to do some of these tests. The L.D. 50 is required in Japan. Japan is the second largest pharmaceutical market in the entire world, and we have to do it in order to get our compounds approved there. And I might add that our industry is one of the few that has a positive exchange in terms of products between Japan and the United States, so it's very important for us.

We think that there were already bills that cover the primary intent of this one. We believe that if there are moves to work on the Draize and the L.D. 50 and to work on other items in this bill, the place to do it is at the national level, so that we will be helped to carry on our business without having to be interfered with on a State-by-State basis.

Now, there have been a lot of war stories told today and I hope you'll bear with me while I refer to

one more. In 1976, we introduced a drug called Tagamet. It was a revolutionary drug for the treatment of peptic ulcer disease. We went through 700 chemical entities before we arrived at Tagamet. Only a very few of those ever went into animal testing. Only a very few. It was a long and expensive program that started back in the early '60's. At the time of approval in this country, 600 people each month were dying from peptic ulcer disease. Within a year, death from the complications of peptic ulcer disease in the United States was almost unheard of, and it's still the same today. If we had been under inspection by some of the entities that are described in this bill and if an unnecessary seizure leading to a delay had occurred, thousands of people would have died while this was waiting for its case to be worked out.

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Finally, I'd just like to say that there have been some implications that we are, in our experimental work on animals, insensitive to their needs and that we will continue to experiment on animals until doomsday. This is absolutely not the case. A vote against this bill is a vote for animal rights and animal health rather than the other way around. We do not believe that a vote against it is a vote for cruelty to animals.

Thank you.

1	REPRESENTATIVE McNALLY: Just a question for
2	the last speaker.
3	BY REPRESENTATIVE McNALLY: (Of Dr. Davis)
4	Q. And I want to make sure I understood this
5	and that I'm clear about this. Did you state that the
6	L.D. 50 test is required in order for a product, a
7	pharmaceutical product, or other product, I suppose, to be
8	sold in Japan?
9	A. For us to get approval for our products, as
10	of this moment, an L.D. 50 is required. We are working to
11	get that changed.
12	Q. What about the Draize test?
13	A. I would refer to Dr. Knauff on that.
14	DR. KNAUFF: The Draize test is required for
15	ophthalmic products throughout the world.
16	REPRESENTATIVE McNALLY: Okay. And is it
17	required for ophthalmic products in the United States?
18	DR. KNAUFF: It is if that ophthalmic
19	product is in a plastic container, because they have
20	the plastics that the containers are made out of have
21	tendency to leech out into the product and will cause eye
22	irritation, so that eye irritation is mandatory.
23	REPRESENTATIVE McNALLY: So the solution
24	that I used on my contact lenses this morning, would that
25	be tested on the Draize test?

DR. KNAUFF: Yes, sir. Yes, sir.

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REPRESENTATIVE McNALLY: And Mr. Hayden also informs me that the L.D. 50 test is required for products sold in Canada, is that correct?

DR. KNAUFF: To the best of my knowledge it is, yes.

REPRESENTATIVE McNALLY: That's it.

BY REPRESENTATIVE HAYDEN: (Of Mr. Brady)

I have one question for Mr. Brady, and I think it's a point that you made in the context of your testimony which needs to be addressed again. You made the statement that even for products which now advertise that they use no animal testing for any of the contents in their products, that, in fact, I have a brochure here that's termed "Responsible Manufacturers," where it says that -- mentions Nexxus and Paul Mitchell hair care products and Elizabeth Taylor's Passion perfume have all be marketed with no animal testing. Then it says, "Each of those companies uses formulations whose safety is known in advance, rendering animal tests unnecessary and promoting consumer safety as well." And you made the statement that somewhere in the history of the ingredients primarily of these products that there had been some kind of animal testing, and in many circumstances not knowing what these individual ingredients are, I can't state, but

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in many cases probably either the Draize eye test, if it's used anywhere near the eye, or in some cases the L.D. 50 test?

A. Right.

In fact, I was reading through some of the Q. literature presented to me by people on the issue which made reference to isopropyl alcohol, which, looking at a number of the household products, you know how it is, you know, your kid's in the bathroom, you're trying to brush his teeth and you end up reading all the ingredients on the toothpaste and everything. I notice that isopropyl alcohol appears in virtually every sort of household item, hair care product, and I think it's even in toothpaste. And I think it's in -- my wife uses this Nexxus stuff, which, by the way, is only available at your -- not available in your regular stores but only available in your hair care places, and Nexxus has isopropyl alcohol in it, and the information I received says that at some point in the development along the lines of isopropyl alcohol they used the Draize eye test?

A. Right.

Q. What I think it does is it makes the point that if you take products which have already been listed as -- and I know there's an industry reference to products whose known safety within the industry, and you can take

1 those compounds who have already been through this testing 2 process, mix them in some formula, do some other testing 3 and predict to some certain degree of certainly what's 4 going to happen. But the point is, and I guess this is 5 for the R&D folks to your right, is that when they're taking new compounds, compounds that have yet to have been 6 7 tested or compounds who have yet to have been mixed with 8 other products that have been tested, that you are, in 9 effect, creating a new product, something obviously that 10 you're going to try to get a patent for and make some 11 money off of, but that you need to do some kind of 12 analysis for this new compound that people have done years 13 ago for isopropyl alcohol, which is now included in a number of these kinds of products which are being branded 14 15 as "responsible manufacturers".

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DR. BOOMAN: Well, speaking for the detergent industry, in the case of significantly different combinations of old ingredients, all of which, by the way, in our industry have some degree of biological activity, is absolutely essential for us to do that.

REPRESENTATIVE HAYDEN: It doesn't require necessarily a response, but I think that it is a point that has been missed, I think, in the discussion up until now.

MR. BRADY: Well, the cosmetic industry

1 reformulates products constantly. I mean, both the small 2 companies and the large companies. And there's an 3 enormous data base. Much of that data base, I might add, 4 as I point out in my testimony, is publicly available 5 through a program called the Cosmetic Ingredient Review, 6 set up by the CPFA, which makes all the commonly used 7 cosmetics ingredients, all the toxicity data is publicly 8 available and companies use that to avoid having to do 9 duplicative tests. Companies like Avon and Noxell and the 10 others also have enormous backlogs of human experience, and the FDA has no objection when you make a slight 11 12 formulation change and you're comfortable with the 1.3 toxicological background of both the ingredients and the 14 finished product through a long history of human use, 15 remembering at the beginning of that human use there was 16 some animal testing. Then they don't require that you do 17 more animal testing.

REPRESENTATIVE HAYDEN: Thank you. I just have one final question.

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DR. DAVIS: Dr. Knauff can add to it.

DR. KNAUFF: One of questions that has been raised here repeatedly is the alternatives that we are all looking for. We have -- Noxell Corporation has been expressed here. We are going to have a meeting on June 6th in Philadelphia, City Line, of all the institutions

that are studying alternatives, including Johns Hopkins,

New York University, Medical College of Pennsylvania, and
the people from Noxell. We are looking at these and we
want to find out exactly where they all stand. The people
from Johns Hopkins have 35 different studies out. We're
going to get a report on all of those, and we invite any
member of this committee to be at that meeting.

REPRESENTATIVE HAYDEN: That's either in my
district or right next to my district. Where is this

district or right next to my district. Where is this meeting going to take place?

DR. KNAUFF: It's going to be at the Adams Mark Hotel.

REPRESENTATIVE HAYDEN: That's in my district. Thank you.

REPRESENTATIVE McNALLY: My last question for the industry representatives is with respect to the refusal to participate in experiment, or I guess it's really limited to dissection and vivisection. Both students and employees are protected by that provision. Do you have any objection to that provision with respect to employees?

DR. DAVIS: With respect to employees, we do not. Whenever we run into a situation like that, we have the employee examine several offers for different types of opportunities within the same area.

1 REPRESENTATIVE McNALLY: Thank you. 2 CHAIRMAN CALTAGIRONE: Dave. 3 REPRESENTATIVE HECKLER: Thank you, Mr. 4 Chairman. 5 BY REPRESENTATIVE HECKLER: (Of Dr. Davis) 6 Dr. Davis, you've expressed some concern at 0. 7 the definitions contained in the bill, well, specifically the definition for an acute toxicity test. I would call 8 9 your attention to the fact that while both that test and 10 the definition of eye irritancy test makes no reference to what substance or what the purpose of the test would be or 11 12 what substances would be used, that the prohibition which 13 is contained in (d) does limit the or prohibit the use of 14 either the Draize or L.D. 50 tests for purposes of testing 15 cosmetics or household products. Would you agree that that prohibition would not impact upon medical research? 16 17 I'd agree from the standpoint of the development of prescription medicines, but perhaps Dr. 18 Knauff can--19 DR. KNAUFF: As long as it is strictly 20 limited to that and it doesn't become amended once it 21 22 reaches the floor. REPRESENTATIVE HECKLER: Well, now we're 23 getting into the kinds of considerations that you folks 24

have to enter into in figuring how to lobby us. Again, I

repeat my earlier enjoiner that it seems that it's incumbent upon us to look at the language as framed and if we happen to conclude that we approve that language, then to see to it that it doesn't get amended, but the old camel's-nose-in-the-door-of-the-tent theory is not, in my view, an appropriate way to look at the legislation.

Thank you.

CHAIRMAN CALTAGIRONE: Thank you, gentlemen, very much.

We will next hear from Erik Hendricks, the Executive Director of the Pennsylvania SPCA.

MR. HENDRICKS: Thank you for this opportunity, Mr. Chairman, and my name is Erik Hendricks, and I am the Executive Director of the Pennsylvania SPCA, which is the oldest and largest humane society in the State of Pennsylvania. Last year we served in 46 of the 67 counties of the Commonwealth from our 6 locations around the State. We performed over 900 routine inspections and investigated more than 3,500 complaints of abuse or neglect involving animals. Unfortunately, even though that sounds like a lot, it's really just a drop in the bucket. We are just one small agency relative to the 11 million citizens in this State. We do what we can, but it's still far from enough. However, I think our efforts make a difference. I'd hate to think what the place would

be like without us and the other humane societies that are working equally as hard in Pennsylvania.

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Now, I don't think any legitimate research institution could fear House Bill 873. We've heard many comments about the search warrant authority and the ability of those with that search warrant authority to know right from wrong, so to speak, when it comes to laboratory animals. Obviously, our agents are not laboratory technicians, they are not technically trained in that area, but it should be remembered that we are really not going in to upset the process of the experiment. We are going in to check into the care of the animal basically outside of that experimental process. We are interested in their housing, their feeding, their watering, things of that nature. We leave the experimental process to the animal care committees and to the Federal and State regulatory authorities to decide whether the experiment itself is a violation of any of those rules, regulations, and quidelines. The exception to that would be if we were told that a Draize test or an L.D. 50 test was being performed and if those tests are contained in a law prohibiting them, we would then look into that particular area. Obviously, our agents would have to be versed in what constitutes an L.D. 50 test or a Draize test.

remembered that just because humane agents and other police authorities have that authority of the search and seizure, that it doesn't mean that we're going to be running into laboratories every day waiving papers at the technicians and the doctors saying, you've got to stop what you're doing, we're going to take over for the next hour and possibly take over all your animals. There must be probable cause, and that's a phrase that has caused all sorts of anguish in the courts because one man's or one judge's probable cause is another judge's non-probable cause.

We don't take the search warrant authority lightly. We do not assume we can get a search warrant. We make sure that before we go to the trouble of procuring a search warrant; which involves getting the okay from a local district attorney and then from a judge, before we go through all of that rigmarole, that we know that the evidence that is being given to us to constitute probable cause is valid. We are not going to put our reputation on the line, and the individual agent involved is not going to risk a criminal charge as well as an individual civil charge on one case. He is not going to risk that. The warrant process is not abused by any humane organization that I know of. I have not heard of any charges against

any Pennsylvania humane society regarding an abuse of this authority, and I don't expect that this particular area should make any difference.

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We have a very hot issue now other than this laboratory work called factory farming. Pennsylvania is one of the largest factory farming States in the country, if not the largest. We have the search warrant authority to investigate factory farming. You have never heard, or at least I have never heard, of any farmer in Pennsylvania complaining that we have abused our privilege and our right under the search warrant authority by harassing his operation with unannounced visits demanding to see his animals or even threatening to take animals that are being kept under these factory farming conditions. I bring this up as an example of the fact that humane societies know their role, know their responsibilities, and know that if they abuse this authority that has been given to them that they will lose all of the authority and that they will then be toothless.

Now, it should also be remembered that this authority is very limited. 5511 contains specific subsections detailing certain violations. It's been brought up several times today, Dr. Gennarelli's Head Injury Lab at the University of Pennsylvania has been brought up several times today. I happen to be quite

knowledgeable in that case because I served on a committee that investigated it. I was appointed by the President of the University of Pennsylvania. Unfortunately, the film that was mentioned earlier today by Representative McHale is good and bad, and I hesitate to recommend anyone seeing it because it has been edited and it is not a total truth, unfortunately. But the reason I bring this up is I doubt that anything was going on in that laboratory, at least from what our investigation showed, that would have allowed a humane society in 1985, even with search warrant authority, to go in and get a warrant because the violations that were going on in that laboratory were violations of Federal statutes and NIH guidelines, not State law. So there would be no probable cause for a humane society to go in under those situations.

The unfortunate aspect of this laboratory inspection process is that the Federal government just doesn't have enough money to pay for all the inspectors that are required to do more than the once a year inspections that are now going on. That is the problem. That is why most laboratory owners, organizations, or companies want to keep the Federal level of inspection the way it is now. They'll talk about duplication and redundancy, but the fact is, it wouldn't be redundancy because inspections aren't being made, only because of a

shortage of manpower. The humane societies, while not composing a lot of people, still have more manpower in Pennsylvania than the USDA does or the NIH. We would be an adjunct of sorts to their inspections, although we would not technically be making routine inspections. We could at least get into the laboratories when there is probable cause, and if we ourselves see things that may not been in violation of our own State statutes against cruelty to animals, we may see violations of NIH guidelines and USDA regulations which we could then report to them. We could not enforce their regulations, but we could act as a reporter to them, and we would be a reliable witness for them to act.

As far as the Draize test is concerned, I can only see one purpose for the Draize test in today's world, and that is as a defense against potential liability claims, and I think that by passing this law, including the Draize test provision, that you do these institutions and corporations a big favor. You rid them of that need to come up with a defense in a liability case saying that we use the Draize test. It would save them a lot of money. The L.D. 50 test is always strange logic, in my viewpoint. From a scientific standpoint, at least the Draize test has a control, which is the other eye of the rabbit. The control mechanism in the L.D. 50 test is

nonexistant. It's one of the cruelest tests ever devised, and the fact that it survived so long is an embarrassment to modern society.

Every time that I testify on an animal bill or anybody seems to testify from the animal welfare side, we're always up against dollars, and I've heard that same argument many times today. You know, how much money is it going to cost? I really don't think that it's going to cost the corporations any money at all. It costs humane societies more money because we will be probably doing more work. We may have to hire some more agents, who knows? We're not sure of that yet, but we're not saying we can't do it. We'll go out and find a way to do it.

animal care committee really could have both a State agriculture agent and a humane society representative on it. I think that may be a logistical problem, but it's one that is easily worked out, I believe. One way of doing it is to have an either/or situation there rather than both. We are representatives on the Animal Care and Use Committee at the University of Pennsylvania. This gives us a very good insight into what is going on at Penn. Our representative is but one vote on that committee of about -- I think there are about eight people on the committee. But even if her vote can't overturn a

1 particular experimental process that she feels is really 2 not in the best interests of humanity, it at least gives 3 pause for thought for the rest of the committee, and in many cases, we have brought up issues that have resulted 4 5 in experimental processes being refined to use fewer 6 animals, or in some cases even the committee has agreed 7 that there really is no meaningful purpose for that 8 experiment. But without a voice in the crowd, so to 9 speak, some of these things can be steamrolled right over, 10 and I think it is important for at least a one outsider to 11 be on these animal care committees, hopefully an outsider 12 with some humane interests so that there will be at least some semblance of balance when it comes to making 13 14 decisions. 15

And that's about what I have to say on it, although I could have said other things, but I don't want to restate the obvious and what has already been mentioned by experts in the field at today's hearing.

CHAIRMAN CALTAGIRONE: Dave.

REPRESENTATIVE HECKLER: Thank you, Mr.

Chairman.

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BY REPRESENTATIEV HECKLER: (Of Mr. Hendricks)

- Q. Mr. Hendricks, a couple of points. Your organization is based in Philadelphia?
 - A. That's right.

- Q. So that do you enforce the humane law of the State outside of the city of Philadelphia?
- A. We are statewide and we have five other locations. We basically run almost across the State. We go from Philadelphia out to Clarion, and in Clarion we go even further west and north. Each of our branches is located in rural areas, and from these locations, our agents cover quite a large area, usually six or seven counties from that branch.
- Q. Okay. Well, I would call your attention to the fact that while I have no doubt that the practice in Philadelphia is that as a district attorney or assistant district attorney must review search warrant affidavits of probable cause, that is a local option provision under the Rules of Criminal Procedure.
 - A. That's correct.
- Q. And I do not believe that that option has been exercised by all that many DAs.
- A. It does vary from county to county. That's for sure. The search warrant provision, a lot of the reasons we can get a search warrant is the fact that we've never abused the search warrant process. If we start abusing it, if a lot of our warrants are found to be faulty, you don't get that signature again.
 - Q. Well, I have to tell you that if the State

Police or somebody else or the DA's Association, of whom I was formerly counsel, came in here and said, well, gee, just lower the standard of probable cause a little bit because if we abuse this we'll get into trouble, I don't think that would get a very good reception.

A. I didn't say that.

- Q. I hear you. The difficulty, I think, that has been perceived by the legislature, however, is figuring out just what amounts to probable cause and in fact what amounts to cruelty to animals in the context of research, and on that I'd like to come back. It seems to me that your testimony really badly muddled together two different concepts. One is the concept of inspection, that someone would have the routine opportunity to go in to a laboratory, another facility that was using animals, and see what was going on, see how the animals are being kept, see what is being done to the animals. Right now, is it correct, that only the Federal government agents can do that?
- A. That's correct. I'll give you a similarity--
 - Q. Wait, I haven't asked the question.
 - A. Okay.
- Q. Okay. Under the proposed scheme of this legislation as I understand it, there would be authority

given to the Pennsylvania Department of Agriculture to regulate and at least implicitly to inspect these facilities, and there would be authority given to you folks as well as the police to get search warrants. Now, do you anticipate, under this legislation, that you would have the opportunity or your agents would have the opportunity to conduct routine inspections?

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Α. Not at all. I'll give you the analogy. Department of Agriculture has a Bureau of Dog Law, as you are well aware. The bureau has its own set of regulations. It has its own set of people to enforce those regulations. Those are the Dog Law Enforcement Officers, or dog wardens, one in each county. That's a very large body of regulations. We do not enforce those regulations. Among the regulations is the inspection process. If you take out a license for a kennel in the State of Pennsylvania, you are agreeing to inspection at any time by one of the dog wardens. You are not agreeing to an inspection by a humane society official, and the way I read this bill, this would be exactly the same. would be licensed by the Department of Agriculture and you would be agreeing to inspection, during normal hours, by a Department of Agriculture officer trained specifically for that purpose. You would not be agreeing to inspection by police officers or agents of the humane society. Not at

all. I'm sorry I muddled it. I'm trying to rush, I think.

- Q. Well, okay. If then we are anticipating in this legislation establishing a cadre of people who know what they're doing, who are familiar with the requirements for the keeping and treatment of animals, why would we want to give search warrant authority to agents of organizations like yours?
- A. We basically act as an adjunct. There's no reason for us to exist, there is no reason for us to have search warrant authority if the State of Pennsylvania would give its State Police and local police more time to take care of this body of law, this section of the law, 5511. The reason we do is it is because they have prioritized criminal activity, and they consider 5511 to be a very, very low priority, and they have just kissed it off over to the humane societies. So basically we are doing the work of the State, even though we are not paid by the State. We're an adjunct situation here. All of the humane societies do this basically without taxpayer expense, and so I think the State should be happy we're here.
- Q. Are you aware that the Federated Humane Societies of Pennsylvania have taken the position in a letter written recently that they would not wish to see

the search warrant provisions of the legislation?

- A. I've discussed it with Jill Erwin. I assume she wrote the letter.
 - Q. Mr. Hancock did.

- A. Oh, he's the president. All right. But I discussed this with Jill Erwin, who is the legislative chairperson of the organization, and we don't agree completely, but it's a minor disagreement. I think that you would find that in actual practice, humane societies would probably not be very involved in going into laboratories. I do not think we would get too many warrants in practice. I think you would be -- the authority we would have in theory, but I expect it would be rarely used.
- Q. One other point, and I apologize for prolonging this, Mr. Chairman. You mentioned that the situation at the University of Penn Head Injury Lab that Representative McHale referred to earlier and which is really one of the only two specific instances I've heard cited today would not have been a case in which a search warrant could have been issued. Why is that?
- A. Well, as I said, we are empowered to enforce a specific section of the law, the 5511 section.

 According to everything that I saw during our investigation of that laboratory, we had access to every

tape. We interviewed all the people who were involved with the laboratory, from Gennarelli up and down. violations were technical violations for the most part of NIH guidelines and certain USDA regulations, such as smoking in the lab, using a scalpel that had fallen on the floor. There were some things going on, shenanigans is a good term, very unprofessional is what it was, and this is what enraged many people more so than some of the other The attitude that the researchers, who were things. graduate students and post-graduate students, had had apparently towards these animals. Gennarelli defended this to some extent by saying this is gallows humor. I know what gallows humor is about because we kill many thousands of animals each year, so I understand that when you're in a situation that is so morbid it's difficult for a human to survive under those conditions without trying to find some way to lighten it.

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Unfortunately for these researchers, these young people who were the actual researchers in the experiment, they were doing it all on videotape and taken out of context. That can be very damaging. The unfortunate part of the videotape was that it was taken out of context in some cases. I see references all the time to this tape in the media, and there are three particular comments that are always made. One, that the

heads were smashed in, which is wrong. Two, that \$14 million was spent on it, which is wrong. One-sixth of that went into the actual baboon aspect of the experiment. The experiment had three areas of involvement. 50 percent of the money went into clinical experiments using humans who had been traumatized, brain damaged humans. The other 20 percent or about 30 percent, I guess it was, went into an alternative, and they developed a wonderful alternative, although you've never really heard about it, using a certain kind of gel and high speed camera techniques to mimic the action of the brain.

Basically, what was happening in that lab was that an animal was immobilized in a device that had to be -- the head had to be sort of cemented into this device, and then the devise was quickly moved. In other words, I'll just show you what happened. The head would go in a 5/1000 of a second from this position to this position (indicating), or from this position to this position in 5/1000 of a second. There was no crushing of the head. It was a manner of acceleration forces, because the brain is swimming inside of our skull in fluid to protect it. What they were showing was the damage that is done when the brain collides with the inside of your skull, and that's where the damage comes from, which is a problem which happens in automobile accidents and athletic

injuries. You can be in a seatbelt in your automobile and your body can look perfectly fine because you didn't go very far in the accident but your head may have gone from this position to this position, and that can kill you or cause -- well, in worst it can just make you a vegetable or something in between. But that's what they were studying. If you would believe some of the critics of the lab, it sounded as if they were taking wide-awake monkeys and taking hammers and smashing their heads in. The fact is, they were using a certain kind of a drug that actually did put the monkeys to sleep, but this dissociative kind of anesthetic made them look like they were awake.

can really make them look bad. And I'm not defending Gennarelli's lab, I'm just defending fair play. You've read my comments, I'm sure, that I was defending fair play. I am not defending his lab. I am saying that it is dangerous to assume that everything that you see in that tape is just the way it's being presented. That tape was edited by PETA, and they did it for their purposes only. And there were bad things going on in that lab, but they were mostly technical problems. I do not think that anything in that lab was actually a violation of Section 5511, and that's why I say I doubt that the search warrant would have really made a difference in terms of our

1	prosecuting that lab. It may have resulted in the NIH
2	investigating quicker because we could see violations of
3	NIH or USDA regulations and report to them, even though we
4	ourselves couldn't prosecute. That would be the
5	difference.
6	Q. Thank you very much.
7	CHAIRMAN CALTAGIRONE: Thank you for your
8	testimony.
9	MR. HENDRICKS: Thank you.
10	CHAIRMAN CALTAGIRONE: And I do want to
11	submit another piece for the record, and I want to thank
12	everybody for attending. The meeting is adjourned.
13	(Whereupon, the proceedings were concluded
14	at 3:40 p.m.)
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1	I hereby certify that the proceedings and
2	evidence are contained fully and accurately in the notes
3	taken by me during the hearing of the within cause, and
4	that this is a true and correct transcript of the same.
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6	Unn-Marie P. Sweeney
7	ANN-MARIE P. SWEENEY
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11	REPRODUCTION OF THE SAME BY ANY MEANS UNLESS UNDER THE
12	DIRECT CONTROL AND/OR SUPERVISION OF THE CERTIFYING
13	REPORTER.
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17	Camp Hill, PA 17011
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