

**CHIMPANZEE HEALTH IMPROVEMENT,
MAINTENANCE AND PROTECTION ACT**

HEARING
BEFORE THE
SUBCOMMITTEE ON
HEALTH AND ENVIRONMENT
OF THE
COMMITTEE ON COMMERCE
HOUSE OF REPRESENTATIVES
ONE HUNDRED SIXTH CONGRESS
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CHIMPANZEE HEALTH IMPROVEMENT, MAINTENANCE AND PROTECTION ACT

THURSDAY, MAY 18, 2000

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE,
SUBCOMMITTEE ON HEALTH AND ENVIRONMENT,
Washington, DC.

The subcommittee met, pursuant to notice, at 11:48 a.m., in room 2322, Rayburn House Office Building, Hon. Michael Bilirakis (chairman) presiding.

Members present: Representatives Bilirakis, Greenwood, Bryant, Brown, and Green.

Staff present: Jason Lee, majority counsel; Kristi Gillis, legislative clerk; and John Ford, minority counsel.

Mr. BILIRAKIS. This hearing will come to order. First, I want to apologize and at least explain the reason why this hearing is starting almost 50 minutes later than originally scheduled. That is because we have had a series of votes on the floor. Additionally, members are waiving their opening statement to allow Dr. Goodall to testify, since it is so very important we hear her testimony. Obviously, we will have a series of votes taking place all day long. It is going to be one of those days, I am afraid.

Dr. Goodall, we so very much appreciate your taking time to be here today. Jane Goodall, Ph.D., is the director of science and research at the Jane Goodall Institute located here in Silver Spring, Maryland. Please proceed.

Mr. BROWN. Mr. Chairman, could I have 5 seconds.

Mr. BILIRAKIS. By all means.

Mr. BROWN. Dr. Goodall, when I was a college student 25 years ago, I heard you come to our campus to speak and I have admired and followed you and been thrilled with the work you've done ever since.

Ms. GOODALL. Thank you.

Mr. BILIRAKIS. Please proceed, Dr. Goodall.

STATEMENT OF JANE GOODALL, PH.D. CBE, DIRECTOR OF SCIENCE AND RESEARCH, THE JANE GOODALL INSTITUTE

Ms. GOODALL. When I began my research in Tanzania's Gombe Stream National Park 40 years ago, scientific attitudes and public perceptions toward chimpanzees were very different than those of today. Then I was criticized for giving them names. I should have given them numbers, talking about their personalities and ascribing to them intellectual abilities—

Mr. BILIRAKIS. Please pull that closer, if you would, Doctor, so we can all hear you better.

Ms. GOODALL. I was criticized for giving them names rather than numbers, describing their vivid personalities and ascribing to them intellectual abilities and emotional expressions that were then considered unique to human beings. Today, however, their biological and behaviorable similarities to humans, their closest living primate relatives, are widely accepted. Unfortunately, the biological similarities, the less than 2 percent difference in the structure of DNA and the striking similarities in the structure of immune systems, similarities in blood and anatomy of brain and central nervous system, mean that hundreds of our closest living relatives in the animal kingdom are imprisoned in medical research laboratories.

Mr. BILIRAKIS. Forgive me, Doctor. Can the audience hear the doctor well enough? Please pull that mike a little closer.

Ms. GOODALL. I'm sorry. My voice isn't good today.

Mr. BILIRAKIS. For better reason, I guess to have the mike a little closer, if you would.

Ms. GOODALL. Can you hear?

Perhaps it wasn't on. Is that better? Yes. It wasn't on, was it? Never mind. You didn't miss too much.

Mr. BILIRAKIS. You are welcome to start all over if you would like.

Ms. GOODALL. Basically what I was saying was that since I began my study in 1960 at the Gombe National Park, attitudes toward chimpanzees have changed rather dramatically, and that when I first began, I was criticized for giving the chimps names and talking about their minds and ascribing to them emotions like happiness, sadness and fear because those were supposed to be unique to humans, but today attitudes have changed quite considerably and unfortunately, some of the biological similarities between humans and chimps like the closeness of the structure of DNA where they differ from us by only just over 1 percent, and the anatomy of brain and central nervous system and the structure of blood and immune system means that they are widely used for medical research, so that there they are, our closest living relatives, imprisoned in very often small cages while we try to find out more about the nature and cures for human disease.

The plight of the chimps in medical research is of increasing concern to very large numbers of people throughout the world, as a matter of fact. Now for the first time, the medical research community has recognized that a cost effective and humane system is needed for the long-term care of chimpanzees. This is demonstrated by the growing list of scientists who have given their support to the permanent retirement system of Congressman Greenwood proposed in H.R. 3514.

Many supporters of this legislation currently work for or run facilities that use chimps in biomedical research that is funded by the National Institutes of Health. These researchers have begun to realize that it is fundamentally wrong to cage these amazing animals alone in tiny cramped cells for the remainder of their long lives, and they can live to be over 60 years. Yet as Thomas Insel, M.D., former director of Yerkes Regional Primate Center said in a

New York Times interview, until there are those kind of resources such as would be provided by this bill, there are going to be chimpanzees in facilities like ours where chimpanzees are basically being warehoused. A humane responsible alternative is to place the chimps in a sanctuary, or sanctuaries. Sanctuary accommodations would be a much cheaper alternative to warehousing chimpanzees in the back of research facilities as well as being more humane.

The surplus problem began in the 1980's and 1990's when the NIH initiated a breeding program that was very productive, but the combination of an increase in chimpanzees and less extensive research use that had been anticipated created a surplus of chimps and a substantial management problem. To address the management problem, in 1994, NIH asked the National Academy of Sciences National Research Council to study alternatives for management of federally funded research chimpanzees.

In 1997, the National Research Council presented its report chimpanzees in research, strategies for their ethical care, management, and use to NIH and to the public. The NRC report, which I have submitted with my written testimony for the record, determines that there are surplus chimps who will, for specific scientific reasons, never be able to be used in research again. It concludes that these surplus chimpanzees could go to a sanctuary similar to the one proposed in the chimp pack. This would be the cheapest and most appropriate way to care for surplus chimpanzees. This legislation is the only humane hope for chimpanzees that will never be used in research again because of the procedures to which they have already been subjected.

Instead of expending research dollars to warehouse chimps sometimes for decades, retiring chimpanzees to a sanctuary will be a humane alternative and it will free financial resources that can be better used to find cures for human ailments.

How can we, as a supposedly enlightened and intelligent people, disregard all we know about chimps as our closest relatives and continue to subject them to cruel standards of research and inhumane lifetime confinement. If we choose to ignore their emotions, intelligence and culture, shouldn't we at least give them a chance to live in peace after giving their lives in the quest for human life?

We are at a crossroads in our relationship with chimps. We have the opportunity to make a major difference in the lives of many chimpanzees to do something now when we realize there is a need and are presented with a solution. In conclusion, Mr. Chairman, and distinguished members of the committee, I wish to remind you and other Members of Congress that this legislation and hearing are not about the future of biomedical research using chimpanzees or the animals used in any research. This legislation is about doing what is right, retiring chimpanzees that are being forced into servitude by us.

The bill does not arbitrarily pull chimpanzees out of research. Quite the contrary. It enables creation of a more appropriate place for them to live when the scientists have determined that they are no longer useful for research. The legislation allows for the creation of sanctuaries which will provide socially, mentally, and physically enriching environments in which chimpanzees can live out their lives. These chimpanzees can never return to the wild, but free

from small cages, they can live in a way that will allow them to socialize to groom each other, to feel breeze in their face, to climb trees. That is surely the least we can do for them in return for their sacrifice.

You are going to hear from NIH about their concern about monitoring the chimps in the sanctuaries. This bill does permit that and I am confident that Congress and this administration will be able to sort out any problems of this sort.

I urge you to pass Congressman Greenwood's bill, H.R. 3514, as quickly as possible. Every day counts for the imprisoned chimpanzees. This bill represents the ethically and fiscally right course of action. Thank you.

[The prepared statement of Jane Goodall follows:]

PREPARED STATEMENT OF JANE GOODALL, THE JANE GOODALL INSTITUTE, U.S.

Thank you Mr. Chairman and members of the Committee for the opportunity to speak before you on this legislation. I have long hoped the U.S. government would take appropriate steps to provide long-term care for chimpanzees in biomedical research and ensure the well-being of these animals who have given so much to help humans. I urge you to pass H.R. 3514 without delay—every day counts and this bill represents the morally, ethically and fiscally right course of action. Congressman Greenwood has presented us with an extraordinary opportunity for the peaceful, permanent retirement from further experimentation of hundreds of these very special beings who are so close to my heart.

When I began my research in Tanzania's Gombe Stream National Park, 40 years ago in 1960, scientific attitudes and public perceptions towards chimpanzees were very different than those of today. Then, I was criticized for giving them names (rather than numbers), describing their vivid personalities, and ascribing to them intellectual abilities and emotional expressions considered unique to human beings. Today, however, their biological and behavioral similarities to humans (their closest living primate relatives) are widely accepted. Unfortunately, the biological similarities—the less than 2% difference in the structure of DNA and the striking similarities in the structure of immune systems, similarities in blood and in anatomy of brain and central nervous system—mean that hundreds of our closest living relatives in the animal kingdom are imprisoned in medical research laboratories, used to investigate a variety of human diseases.

The plight of chimpanzees used in medical research is of great concern to countless numbers of people across the United States and around the world. Indeed, a number of scientists have expressed concern as to the validity of using chimpanzees living in highly stressful situations as models for investigating human diseases since stress is known to affect the immune system and this, in turn, may invalidate certain medical tests. Thus it is of great importance to search for and encourage alternatives to the use of chimpanzees in laboratory testing for scientific as well as humane reasons.

What of these chimpanzees that end up in medical research laboratories, some 2,000 chimps imprisoned in labs worldwide—about 1,500 of them in the United States alone? Visiting the labs and looking into the bewildered, or sad, or angry eyes of the prisoners in their cages, is the worst kind of nightmare. Animal researchers, to make it easier for them to do what they feel they must do, often ignore or even deny the psychological needs of their subjects—needs which are so like ours. The trouble is that many lab chimps have learned to distrust and even hate humans; they await the opportunity to spit, to throw feces, to bite. We cannot blame them. But it means that those who work in the labs cannot imagine the dignity, the magnificence, of free-living chimpanzees. So how do we open blinded eyes, bring feeling to frozen hearts? Perhaps with stories, stories about the chimpanzee in the wild, the fascination of their lives in the forest.

If we succeed, if scientists start to see into the minds of the animals for whose plight they are to some extent responsible, they can no longer be at peace. For once we accept or even suspect that humans are not the only beings with personalities, not the only beings capable of rational thought and problem-solving, not the only beings to experience joy and sadness and despair, and above all not the only beings to know mental as well as physical suffering, we become less arrogant, a little less sure that we have the inalienable right to make use of other life forms in any way we please so long as there is a possible benefit for us. We humans are, of course,

unique, but we are not so different from the rest of the animal kingdom as we used to suppose: the line between humans and other animals, once perceived as sharp, is blurred. And this leads to a new humility, a new respect.

JoJo was the first adult male I met when I visited the former chimp colony at LEMSIP (the laboratory for Experimental Medicine and Surgery in Primates, located at New York University). “He’s gentle,” said the veterinarian, Jim Mahoney, “he won’t hurt you.” I knelt and reached through the thick, cold steel bars of his prison cell with my gloved hand. I thought of David Greybeard, the first wild chimpanzee to lose his fear and allow me into his world. JoJo had a similar face, and white hairs on his chin. As I looked into his eyes, I saw no anger, only puzzlement, and gratitude that I had stopped to speak to him, to break the terrible gray monotony of the day. And I felt deep shame, shame that we, with our more sophisticated intellect, with our greater capacity for understanding and compassion, had deprived JoJo of almost everything. Not for him the soft colors of the forest, the dim greens and browns entwined. Nor the peace of the afternoon when the sun filters through the canopy and small creatures rustle and flit and creep among the leaves. Not for him the freedom to choose, each day, how he would spend his time, and where and with whom. Instead of nature’s sounds of running water, of wind in the branches, of chimpanzee calls ringing through the forest, JoJo knew only the loud, horrible sounds of clanging bars and banging doors, and the deafening volume of chimpanzee calls in underground rooms. In the lab, the world was concrete and steel—no soft forest floor, no springy leafy branches for making beds at night. There were no windows, nothing to look at, nothing to play with. JoJo had been torn from his forest world as an infant, torn from his family and friends and, innocent of crime, locked into solitary confinement. No wonder I had a strong sense of guilt, the guilt of my species. Needing forgiveness, I looked into JoJo’s clear eyes. And he reached out a large gentle finger and touched the tear that trickled down into my mask.

How should we relate to beings who look into mirrors and see themselves as individuals, who mourn companions and may die of grief, who have consciousness of “self”? Don’t they deserve to be treated with the same sort of consideration we accord to other highly sensitive, conscious beings—ourselves? For ethical reasons, we no longer perform certain experiments on humans; I suggest that in good conscience the least we could do is afford the chimpanzees we have already used a peaceable life.

Now, for the first time, the medical research community has recognized that a cost-effective and humane system is needed for the long term care of chimpanzees confined in laboratory cages. This is demonstrated by the growing list of scientists who have given their support to the permanent retirement system proposed in H.R. 3514.

Many supporters of this legislation currently work for or run facilities that use chimpanzees in biomedical research funded by the National Institutes of Health. These researchers have begun to realize that it is fundamentally wrong to cage these amazing animals alone in tiny cramped cells for the remainder of their long lives (they can live to be 60 years old). Yet, as Thomas Insel, MD, former Director of the Yerkes Regional Primate Center said in a New York Times interview, “Until there are those kinds of resources [H.R. 3514], there are going to be chimpanzees in facilities like ours where chimpanzees are basically being warehoused.” A humane, responsible alternative is to place the chimps in a sanctuary. Sanctuary accommodations would be a much cheaper alternative than warehousing chimpanzees in the back of research facilities.

The surplus problem began in the 80’s and 90’s when the National Institutes of Health initiated, according to minutes on Dr. Ray O’Neill’s presentation to at January 2000 National Advisory Research Resources Council meeting, a “breeding program that was very productive, but the combination of an increase in chimpanzees and less extensive research use than expected, created a surplus of chimpanzees, and a substantial management problem.” To address the management problem, in 1994, NIH asked the National Academy of Science’s National Research Council to study alternatives for management of federally funded research chimpanzees. In 1997, the National Research Council presented its report *Chimpanzees in Research: Strategies for their Ethical Care, Management and Use* to NIH and the public. The NRC Report, which I have submitted with my written testimony for the record, determines that there are “surplus chimpanzees” who will, for specific scientific reasons, never be able to be used in research again. It concludes that these surplus chimpanzees, already retirement ready, could go to a sanctuary, similar to the one proposed in the CHIMP Act. This would be the cheapest and most appropriate route to care for surplus chimpanzees.

This legislation is the only humane hope for chimpanzees that will never be used in research again because of the procedures to which they have already been sub-

jected. Instead of expending research dollars to warehouse chimpanzees, sometimes for decades, retiring chimpanzees to a sanctuary will be a humane alternative that also frees financial resources that can better be used to find cures for human ailments.

How can we, as a supposedly enlightened, intelligent people, disregard all we know about chimpanzees and continue to subject them to the cruel standards of research and inhumane lifetime confinement? If we choose to ignore their emotions, intelligence, culture and relation to humans, shouldn't we at least give them a chance to live in peace after giving their lives in the quest for human advancement? We are at a crossroads in our relationship with chimpanzees. We have the opportunity to make a major difference in many chimpanzee lives; to do something now when we realize there is a need, and are presented with a solution.

In conclusion, Mr. Chairman and distinguished members of the Committee I wish to remind you and other members Congress that this legislation and hearing are NOT about the future of biomedical research or the animals used in any research. This legislation is about doing what is right: retiring chimpanzees that have been forced into servitude to us. The bill does not arbitrarily pull chimps out of research. Quite the contrary, it enables creation of a more appropriate place for them to live when the scientists have determined that they are no longer useful for research. The legislation allows for the creation of sanctuaries which will provide socially, mentally, and physically enriching environments in which chimpanzees can live out their lives.

These chimps can never return to the wild, but free from cages they can live in a way that will allow them to socialize, feel the breeze in their faces, climb trees, and groom with their friends. That is, surely, the least we can do for them, in return for their sacrifice.

Thank you.

Mr. BILIRAKIS. Thank you so much, Doctor.

Obviously, your written statement is a part of the record. I guess I will start off the questioning very briefly, very quickly. I understand you are going to have to leave. We will try to expedite this.

Dr. Goodall, you made a comment in your statement that these chimpanzees cannot be returned to the wild. Why is that? Is that because of the domestication of them over this period of time—can you explain that to me?

Ms. GOODALL. It is a whole variety of reasons, but basically, it is almost impossible to return chimpanzees to the wild, even in Africa we are struggling with caring for orphan chimps whose mothers have been shot. There isn't in most places enough wild forest for the wild chimpanzees, let alone trying to introduce more, and wild chimpanzees are very aggressively territorial. They would probably attack and maybe kill any chimpanzees that we might try to introduce into the wild. Also these chimps are familiar with people and they'd wander into a village and either hurt someone or be hurt themselves. There is also the disease factor. If they are infected, then it would be entirely inappropriate to even try.

Mr. BILIRAKIS. How long do they typically live in captivity?

Ms. GOODALL. There are a number that have lived to be 60 and more.

Mr. BILIRAKIS. You referred, of course, to the sanctuaries which are part of the Greenwood legislation. How, in your opinion, should they be structured?

Ms. GOODALL. They should be structured probably slightly different for slightly different chimpanzees because some have been in captivity for so long it is very hard to resocialize them in a large group. They might always have to be just in pairs or threes. Others, especially the younger ones, can be introduced into much larger groups so they would have places to sleep at night. It would be

rather like a big zoo, really, a safari park zoo. They would have places to go, things to climb, a very enriched environment.

Mr. BILIRAKIS. Doctor, I am not sure if you can respond to this, so if not, don't worry about it. Mr. Greenwood knows, though he and I have talked, and there are a number of what I will refer to as "sanctuaries," for lack of a proper word. I am not saying that they are all adequate sanctuaries around the country. I know there is one, in my district in Florida, which has been rendered by the Agriculture Department, to be not quite up to standard.

I guess my question is while considering expenses is it better to have 1 or 2, however many might be required, sanctuaries, located in Louisiana, which I believe is the location being considered right now, if I remember correctly, as opposed to possibly affording the dollars to the current sanctuaries, which are maybe not fit adequately today? In other words, would we do as good a job or a better job concentrating on the sanctuaries that now exist and need to be retrofitted, if you will, against the one large sanctuary? I don't know if you get my point.

Ms. GOODALL. I do. I don't personally—I think you will find differences of opinion on this among the people who work with sanctuary chimps, but I personally don't think one huge sanctuary would be a very useful thing. For one thing, the fear of disease spreading through and for another—I don't know—so many chimps all together might not be good. We are talking in terms of a couple hundred here. So my feeling would be that maybe, in some cases, existing sanctuaries can be slightly enlarged, but that has already been done with all the chimps that came out of the LEMSIP lab. And in other cases, building new sanctuaries particularly for those chimpanzees who are infected, and that's the one you are talking about in Louisiana.

Mr. BILIRAKIS. Yes. Thank you very much, Doctor.

Mr. Greenwood?

Mr. GREENWOOD. Thank you, Mr. Chairman. Let me thank you for holding this hearing. I really deeply appreciate it and for the chairman and other members here who have asked me why I have introduced this CHIMP bill, you now know all of the good reasons, but your also having had the opportunity to meet Dr. Goodall know how impossible it would be to say no to her after such a request.

There are two points, Dr. Goodall, that I think we need to have your testimony on. The biggest stumbling block I think right now between the National Institutes of Health and our efforts here are this line that we have drawn about permanency. What we've said in the bill that once, and it is for the researchers to determine this, but once a researcher says that this particular chimpanzee is no longer needed for research, that it would go to the sanctuary and be done, and it would retire there, and the NIH feels that they need the ability to pull them back out, I think and we will query them soon, but I think their focus is if there was some dread disease that suddenly was newly discovered and we needed to do massive amounts of research, that we might suddenly wish we could pull hundreds of these chimpanzees out for research. I would like your comments about that. Why you think it is important that the retirement be a one-way street, if you will?

Ms. GOODALL. I think it is important for ethical reasons and once you admit that the similarities in brain and central nervous system have created a being who is like us in so many ways, in particular, the expression of emotions and the intellect, then to take such a being out of some kind of close, and for them, probably extremely unpleasant confinement, to give them a slight taste of what it is like to be more like a real chimp, to have some freedom, to have some control over his or her life, and then suddenly to take them out again would be very ethically wrong, in my opinion.

On the other hand, if you had to choose, you know, thinking from the point of view of the chimp, if you are a chimpanzee now in a 5-foot-by-5-foot cage, and you have a chance of getting out, even if meant being pulled back in in 15 years, probably you would choose to go out for 15 years, but that is down the road. On principal, I don't think they should be pulled back in.

Mr. GREENWOOD. Thank you. If I have the time, the second issue which is very related to that one goes to the nature of a chimpanzee. I think, as you began your statement, that some time ago people didn't ascribe emotions to these animals and now that has changed. It has probably changed for many people, maybe most people but not necessarily for everyone. This is the thing that I think you know the most about, what these animals are like in terms of their emotions and their feelings and their ability to suffer or to feel joy. Could you share your thoughts on this?

Ms. GOODALL. As you know, we have worked for 40 years in the Gombe National Park as well as some other places. And I think the thing that really strikes you is how much like us their behavior is. You have got this long childhood, 5 years of suckling and 5 years during which the child is quite dependent on the mother and is, during all this time, learning, learning by observing the actions of others around and the long-term bonds that therefore can develop between mother and child as the child gets older and then between the siblings as the next child is born when the eldest is 5 or 6.

So you have got these long-term, friendly, supportive bonds developing between them lasting throughout life and we see the non-verbal expressions of communication: Kissing, embracing, holding hands, patting on the back, grinning and anger, and these are postures and gestures that we use ourselves in our own nonverbal communication, and they are pretty similar in different cultures around the world, and the chimps are triggered by the same kind of things that cause them in us, so they clearly mean the same kind of thing.

We have seen examples at Gombe of chimpanzee mothers dying and their offspring, even though they are able to care for themselves nutritionally, they die of grief, apparent grief because they show symptoms like clinical depression in small human children and they give up, they don't want to eat, don't want to interact with others.

We see amazing examples of altruism. If the mother dies, the elder sister or brother will adopt the baby. Providing it can survive without milk, then that will be a successful adoption. The child may live. The most fascinating one of all, there was a little infant of $3\frac{1}{4}$ who had no brother and sister when his mother died, and he was adopted and cared for by a 12-year-old adolescent male who

waited for him, let him ride on his back. If little Mel whimpered begging for food, then Spindle would share his food. When Mel crept up to his nest at night and sat attentively on the edge because they make these beautiful, soft leafy beds every night, then Spindle would reach out and draw him in. Spindle would even risk rousing the ruff of the adult males by running in to collect Mel if he got too near to the big males and they were about to start one of their magnificent charging displays when they may actually, along with picking up and hurling rocks and branches, if an infant gets in the way, they may pick the infant up and throw it, and the mother's job is to take the infant away, and Spindle did that, even though he was of that age when he is really hero worshipping the big male. So you see the whole gamut.

Mr. GREENWOOD. By contrast, what do you observe when you see these chimpanzees in captivity in small wire cages?

Ms. GOODALL. They have no ability to express their feelings, their emotions, except rattling the cages or reaching out a sad little hand and begging you to stop and interact with them for a moment. I think the worst thing for me in a small cage, and this includes some zoos as well, is that they have no ability to control their day-to-day lives. In the wild you get up in the morning and you choose, do I want to go off with a big group of other individuals, patrol the boundary, perhaps go on a hunt or do I want to wander off with one or two females and be peaceful, or maybe I want to go by myself or perhaps with a little group of the boys.

So there is this constant choice, and this magnificent freedom in which they can express themselves as they will and in a small cage, none of that is possible. You know, they love that comfort. So when they make these nests at night, sometimes they will lie down and then they will sit up and reach out and pick a handful of soft leafy twigs and put it under their head.

So often in these lab cages they have nothing, maybe one motor-car tire and in some of the cages they can't even stretch out to their full length.

Mr. GREENWOOD. Thank you, Mr. Chairman.

Mr. BILIRAKIS. I thank the gentleman. Mr. Green, are you prepared to inquire or would you defer?

Mr. GREEN. Yes, sir.

Mr. BILIRAKIS. Mr. Bryant.

Mr. BRYANT. Thank you, Mr. Chairman. Thank you for holding this hearing. Doctor, it is good to have you here. We really appreciate your very qualified testimony. I apologize to you for being late, and I understand you may have to leave also, but to other members of the panel that may have to leave. Much like you have just described chimpanzees, Members of Congress also have to make a lot of choices throughout our day. Sometimes we have to go out and hunt. Sometimes we have to go out and play with the boys and hopefully we are not chasing too many of the females. But we are having to make those decisions today with our schedule and every day, but I do thank you for providing such insight into this issue.

As I said, I think we are both going to have to leave probably before the testimony from the NIH is given in the second panel, but I did want to follow up and I know you referenced some of that,

some of your responses, but I want to follow up and give you more opportunity to address that issue, a couple of issues that are raised actually in the NIH testimony.

Of course, I think they testify similar to you that chimpanzees have unique health care requirements and pose hazards to caretakers and to other unexposed animals in the colonies and to the public, so therefore, their care must be done by people with knowledge and expertise specific to their histories.

One of their concerns is that under this bill, and I am going to support this bill, but under the bill, the NIH is going to look to private—not NIH actually, the bill would require some matching funds from private organizations in NIH's concern about the well-being of the chimpanzees and if the funding stream over a long period of time might dry up or be affected where you are dependent, or a portion of that, at least, on private entities, is that a concern?

Ms. GOODALL. I suppose it could be a concern, but I think so often in this life we embark on something and are prepared as best we can be, and the fact that something might go wrong way down the line I don't think for me is an excuse for not doing it at all, and I think we have to be very determined that once we get this going, then the funding will be found. People become quite emotional about chimpanzees. They have enormous supporters and even those chimps that are infected with HIV, they are actually not sick and it is extremely—I am not the one qualified to talk about this. I think Dr. Prince is, but you can touch them and play with them and it would be extremely unlikely that they would infect you unless they savagely bit you.

So the fact that some money might dry up way down the road, I would not think is a good reason for not starting.

Mr. BRYANT. Thank you. I like that concept in the bill too where we do bring the private sector in in addition to the government. That is a principle I like to see in as much legislation as possible. The second issue, and my final issue, has to do with NIH's concern about their ability to access the chimpanzees and for subsequent followup, I guess research or after the retirement there might be other unforeseen reasons or purposes for them to have access.

They mentioned potentially minimally invasive procedures such as blood draws and urine collection, and even perhaps conducting postmortem examinations of those who die. I know you mentioned that under the bill they would have access, but do you see any conflict in what you are reading in the bill and what you are testifying to and what the NIH would need from a medical standpoint in subsequent research.

Ms. GOODALL. Again, I am not really qualified on this, but I do know we used to have chimpanzees at the Stanford outdoor primate facility, some of whom were adults, and we managed to train every single one of them to put their arm out to donate blood, and I was just with the banobo colony in Milwaukee where I think about half the colony, they put their arm through a little tube and blood is taken. Urine is pretty easy to collect. It is quite simple. We even do that in Gombe National Park in the wild.

Postmortems when they are dead, I don't think anybody would argue or worry about that. Caring for them when they are sick and the facilities that take on the chimps that are being infected, they

are going to be staffed by people who are aware of the condition of the chimps and understand how they should safely be treated.

Mr. BRYANT. Thank you, Mr. Chairman. I still have some time left and would yield it back.

Mr. BILIRAKIS. I appreciate that. I thank the gentleman, Mr. Green, to inquire.

Mr. GREEN. Thank you, Mr. Chairman. And Dr. Goodall, again, I will follow up my colleague from Tennessee and apologize for all the schedules we have between votes and constituents and other meetings. First of all, I believe, as Members of Congress and as humans, we have a responsibility, and that is why I think this bill is a good piece of legislation. I have a couple of questions. One, should the chimpanzees that are not used in research, such as zoo animals, be eligible to apply for retirement to a sanctuary, and is there an estimate on the numbers that we may have and comment on other non-research sources for these animals so we can see, because again, I think we have an obligation, not only as Members of Congress, but also the zoos in the country and the other facilities that are non-government.

Ms. GOODALL. Well, the zoos are trying to get better and better, and I have seen some facilities in some of the zoos. That would be the kind of situation that we are envisioning as a sanctuary, so there is a merging there between a good zoo and a sanctuary. There are some places that are described as sanctuaries which are actually not sanctuaries at all. They are very little better than a bad zoo. You have to go through each one of these one by one and assess them. There are certain wayside zoos. There are all the chimpanzees in entertainment. That is another big problem, but we can't, I suppose, deal with that here. They should be eligible for retirement in sanctuaries. Instead, traditionally and typically, the ex-circus chimps, the ex-pets have ended up in medical research.

Mr. GREEN. Do you have any kind of idea about the numbers? It seems like it would be—consider the size of our country, would it be double what we expect—

Ms. GOODALL. There is about 1,500 in medical research and the figure which used to be bandied around is between 4- and 500 in zoos, but there are so many pets, so many chimps. We are trying to make a list of them all, but it is very hard, because it is still legal to buy and sell these closest relatives of ours. That, in itself, would make a big difference if there was a bill in the future to make it illegal to buy and sell our closest relatives. At the moment you can go and buy a chimp without being asked at all if you know what they are like and what you are letting yourselves in for. People think they will never grow bigger than this.

Mr. GREEN. We have that problem, though, with lots of other species. Particularly in my home State of Texas, we have people who keep tigers and lions and they don't realize the responsibility they have with it. In fact, in the State, we have actually had to pass laws especially on their liability that they have, and oftentimes people didn't realize it. They may not want that liability question just to be able to keep their pet tiger. Some of us in Congress think we already have a tiger. One, I appreciate your work for many years, and not only as a Member of Congress, even before

I was a Member of Congress, I followed your work and I appreciate it and your suggestions and your statement here today.

Thank you, Mr. Chairman.

Mr. BILIRAKIS. I thank the gentleman.

Dr. Goodall, if I may, the gentleman maybe will yield back.

Mr. GREEN. I yield back my time.

Mr. BILIRAKIS. Dr. Strandberg, from the NIH, is going to testify that the NIH can't support this legislation because it would make the animals permanently unavailable for study or monitoring. Expand upon that. What is your feeling there? How strongly do you feel about their not being available for invasive research procedures?

Ms. GOODALL. Well, I think the most important thing here is can they be left in the sanctuary and there are certain procedures, even over and above taking blood which could be carried out—this isn't my field at all, but I imagine there are some—we even treat—

Mr. BILIRAKIS. But in your opinion.

Ms. GOODALL. My opinion, yes, and there are some things you can do without taking them away from their sanctuary. They might require a small operation. You might have to keep them in a holding facility which would be there, a veterinarian facility built into all these sanctuaries.

I think the really cruel thing from the point of view of the chimpanzee, as I know him, would be to take him away from a place where he has now become resocialized, he has learned to understand the concept of freedom again, or relative freedom, and to put him back in the small square lab cage or the slightly bigger square lab cage, this, in my mind, would be very cruel.

Mr. BILIRAKIS. Thank you. Any further questions from any members of the subcommittee?

Doctor, it has been an honor to have you here today. You obviously have been an awful lot of help and you have given us a viewpoint that only you can really provide, and you are now excused, and again, with great thanks on our part.

Ms. GOODALL. Thank you. As an ambassador for the chimps, I am really happy that there is a group of people here who care the way I do.

Mr. BILIRAKIS. Thank you, Doctor.

The Chair wants to acknowledge and thank Dr. Strandberg, who is a special assistant to the director of the National Center for Research Resources with the NIH.

Ordinarily, the administration is the first witness but Dr. Strandberg very kindly and considerately gave up that to Dr. Goodall. As Dr. Strandberg comes forward, the Chair will now go into opening statements.

First of all, of course the opening statements of all members of the subcommittee will be made a part of the record. The Chair will proceed with his quick opening statement thanking all the witnesses who have taken the time to join us. Also wanting to recognize and thank the gentleman from Pennsylvania, Mr. Greenwood, for his interest and concern on this particular issue.

Chimpanzees have been used as research subjects in this country for many years. Biomedical research and research on infectious diseases in particular has focused on chimpanzees because of the simi-

larities, as Dr. Goodall told us, to human immune systems. In fact, 98 percent of human DNA and chimpanzee DNA is identical. One direct result of research on chimpanzees has been the development of the hepatitis B vaccine.

In the early 1980's, the National Institutes of Health launched a breeding program to ensure that there were enough chimpanzees for research on HIV and AIDS. However, researchers soon discovered that chimpanzees were not a good model for this sort of research since chimpanzees infected with HIV rarely develop full-blown AIDS.

Today the Federal Government has a surplus as already has been discussed of research chimpanzees. There are now approximately 1700 of them in Federal research facilities while estimates of the number of chimpanzees actually needed in primate research laboratories range from 600 to 1,000, therefore a surplus.

The testimony we will hear today will reflect differing views among experts about how to address the surplus of research chimpanzees. Some of the issues for consideration include whether a sanctuary should be established to meet their long-term needs and whether the NIH should be able to recall retired chimpanzees for further research.

Again, I would like to welcome and thank today's witnesses, and we will now recognize Mr. Green sitting in for Mr. Brown as the ranking member for his opening statement. Please proceed, sir.

Mr. GREEN. Thank you, Mr. Chairman. I will be as brief as possible. One, I appreciate the opportunity to have this hearing today, and I also thank my colleague, Mr. Greenwood from Pennsylvania for his excellent work on crafting the ChiMP Act. I look forward to hearing more from the testimony today other than Dr. Goodall.

As human beings, supposedly the most intelligent species on earth, we have a responsibility and moral obligation to ensure that all of God's creatures are treated with respect. There are approximately 1500 captive chimpanzees in labs in the United States today, and the National Research Council advised NIH a few years ago that a core population of 1,000 chimps should be transferred to and supported by the Federal Government.

The NRC report recommended that sanctuaries for chimps that have been retired from research should be created, and that the NRC suggested a private public approach to governing these sanctuaries. One, what has NIH done since this report was released, and unfortunately I don't think enough, and although the agency recently took steps and rescued some chimps at the Coulston facility, too many other animals are suffering and because we have not taken action on this issue.

Again, I was honored to have Dr. Goodall here along with the other experts today to lend their support to Mr. Greenwood's bill, and hopefully our hearing will result in a markup and passage of this bill as soon as possible.

Thank you, Mr. Chairman.

[The prepared statement of Hon. Gene Green follows:]

PREPARED STATEMENT OF HON. GENE GREEN, A REPRESENTATIVE IN CONGRESS FROM
THE STATE OF TEXAS

Mr. Chairman, thank you for calling this important hearing today. I'd like to commend my colleague, Mr. Greenwood, for his excellent work in crafting the CHIMP act.

I look forward to hearing more about the need for this important legislation today. As human beings, supposedly the most intelligent species on earth, we have a responsibility and a moral obligation to ensure that all of God's creatures are treated with respect.

There are approximately 1,500 captive chimpanzees in labs in the United States today.

The National Research Council advised NIH, three years ago, that a core population of 1,000 chimps should be transferred to, and supported by, the federal government.

The NRC report recommended that sanctuaries for chimps that have been retired from research should be created. And, the NRC suggested a public-private approach to governing these sanctuaries.

What has NIH done since this report was released? Unfortunately, not enough. Although the agency recently took steps to rescue some chimps at the Colson facility, too many other animals are suffering because we have not taken action on this issue.

We are honored to have Dr. Jane Goodall and other experts here today to lend their support to Mr. Greenwood's bill.

Hopefully, this hearing will result in the mark-up and passage of that bill as soon as possible.

Mr. BILIRAKIS. I thank the gentleman.

Mr. Greenwood for an opening statement.

Mr. GREENWOOD. Thank you, Mr. Chairman. Again, I do want to thank you personally for holding this hearing. And I don't have a formal opening statement, but would make a couple of points. Most of the factual statements have been made by Dr. Goodall and the chairman in his opening statement.

I want to reiterate this quote from the 1997 study of the National Research Council, and they found that if quote, the current lack of long range planning and coordination continues, the combination of excess captive chimpanzees in the U.S. biomedical population and lack of facilities and resources to care for increasing numbers adequately will soon become an insurmountable problem of enormous complexity, cost and ethical concern, and it was they who recommended the concept of sanctuaries in four states specifically.

This should be what we call a no-brainer. This is our opportunity to continue to use these animals for research where it is warranted; second, to save taxpayers' dollars because we think we can do this with a combination of public and private sources at less cost. We are spending millions of dollars now to keep these animals in inhumane conditions and finally, to do what Dr. Goodall is most concerned about, and that is, to treat these animals humanely. There are some difficulties. I am convinced that we can, and that we will, and that we must resolve them. We have to get beyond this. I don't think there is any question.

There is a difference of opinion about the fact that we need to get these sanctuaries going and get them up and running, and the importance we place on this, I think, is really a factor of how deeply we believe in what Dr. Goodall said about what kind of beings these chimpanzees are. Our stature is not determined by our ability to decide to determine how different we are and how superior we are, or inferior chimpanzees are, and how unlike us they are

but rather, I think our stature is measured by our degree of humanity toward them and that is what this process is about. I yield back, Mr. Chairman.

Mr. BILIRAKIS. I thank the gentleman.

[Additional statements submitted for the record follow:]

PREPARED STATEMENT OF HON. TOM BLILEY, CHAIRMAN, COMMITTEE ON COMMERCE

I want to thank the gentleman from Pennsylvania, Mr. Greenwood, for his leadership on this issue, and of course, the Subcommittee Chairman, Mr. Bilirakis.

Chimpanzees have been used in research studies for decades. Humans have benefited, and continue to benefit from research done in primate laboratories across the country.

However, due to a successful National Institutes of Health breeding program and changes in the use of chimpanzees for research, a surplus of chimps has developed.

The testimony we will hear today will reflect differing views among experts about what to do with the retired chimpanzees.

Mr. Greenwood has introduced a sensible, bipartisan bill that incorporates many of the recommendations of a 1997 National Research Council panel. He has also worked with various organizations to find common ground on this troubling problem. This hearing will be a good opportunity to air some outstanding issues and to learn more about this issue.

We have before us two panels of witnesses. I welcome their testimony and look forward to hearing their views on this issue.

PREPARED STATEMENT OF HON. SHERROD BROWN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Thank you, Mr. Chairman. And thank you to our distinguished panel of witnesses. It's a pleasure to have you testify before us, Dr. Goodall.

And I want to commend my colleague, Mr. Greenwood, for bringing Congressional attention to this issue.

Great work is being done in research with the use of animal subjects like Chimpanzees. Federal agencies including the NIH, CDC, FDA and NASA rely on chimps for research.

Chimps have proven to be an invaluable resource in the study of human diseases—breakthroughs in Hepatitis B and C can be attributed to research conducted with these primates.

Ohio State University's Chimpanzee Center is expanding their 17 year old program on cognitive and behavioral research and building a new facility. They are very supportive of the need for the sanctuaries outlined in this legislation.

In the mid-to-late eighties, the federal government launched a vigorous chimpanzee breeding program aimed at finding answers to the cause of AIDS.

While these animals served us well in research that led to breakthrough medical treatments for many diseases, researchers discovered chimps were not a good model for AIDS research.

As a result, there is a surplus of Chimps living with HIV that deserve our attention in their post-research existence.

Today, chimps no longer needed for research are being housed in warehouses in laboratories throughout the nation at a price of \$7.5 million annually.

Some are living at a facility charged with gross negligence in their treatment of chimps.

The passage of this bill would establish a cost-effective, public-private partnership to create a sanctuary system to provide for the lifetime care of chimps.

These sanctuaries would be staffed by trained professionals and overseen by a board of professionals with a thorough understanding of the medical needs of the chimps and the safety requirements of their caretakers.

There is a moral responsibility for the long-term care of chimpanzees that are used for our benefit in scientific research.

I would urge this committee not only to consider, but to mark-up and pass this bill.

Thank you Mr. Chairman.

PREPARED STATEMENT OF HON. ANNA G. ESHOO, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF CALIFORNIA

Thank you Mr. Chairman for holding this hearing today on protecting chimpanzees which have been part of biomedical research.

The tale of chimpanzee use is a mixed one. Early research using chimpanzees focused on potential effects to humans from space exploration. Today, chimpanzees are being used for medical research on issues such as infectious disease. From levels numbering in the millions, chimpanzees now have populations of less than 200,000 in the wild. The United States holds approximately 1,700 chimpanzees in U.S. laboratories but only needs approximately 600, according to the National Institutes of Health.

Regardless of one's view on the necessity for this type of research, I look forward to hearing from our witnesses today to discuss ways we can humanely treat these special creatures after they've been used in biomedical research conducted by the government.

The need for a humane retirement system for chimpanzees no longer needed in research is vitally necessary if we're to fulfill our responsibility of being good custodians of these animals. I'm proud to be a co-sponsor of legislation, H.R. 3514, the Chimpanzee Health Improvement, Maintenance and Protection Act, which would provide for a system of sanctuaries for chimpanzees that have been designated as being no longer needed in research conducted or supported by the Public Health Service.

This important bill incorporates many of the recommendations included in a 1997 study by the National Research Council on ways to improve the long-term care of chimpanzees. The bill mandates that all surplus chimpanzees owned by the Federal Government shall be accepted into the long-term sanctuary system to ensure that they are permanently managed for their well-being and in an ethical manner.

This bill is necessary, especially considering the continuing and alarming reports of animal abuse by the Coulston Foundation which currently houses hundreds of retired chimpanzees. In fact since 1995, the Agriculture Department has investigated and brought charges against Coulston for numerous violations of the Animal Welfare Act, including the death of at least nine chimpanzees.

We should not stand by and allow for this horrendous treatment at any housing facility for chimpanzees. I ask this Committee to learn from the testimony given today and move for speedy action on the Chimpanzee Health Improvement, Maintenance and Protection Act.

PREPARED STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF MICHIGAN

Mr. Chairman, thank you for holding today's hearing to discuss the role and obligation of the U.S. government for the long-term care of surplus chimpanzees that were bred and used for biomedical research of direct benefit to humans. I am pleased that we will be hearing from Dr. Jane Goodall on this issue. Chimpanzees could not have a more respected and compassionate advocate.

I am concerned, however, about the message the decision to hold this hearing, but not to hold others, sends to the American people about the priorities of this Congress. A multitude of critical problems in America's research infrastructure and healthcare delivery system persist, while proposals to deal with them languish without hearings and action by this Subcommittee. These include: funding reauthorizations for program administered by the National Institutes of Health and the Substance Abuse and Mental Health Services Administration; restoration of federal jurisdiction to control tobacco use by America's children; access to prescription drugs for senior citizens; long-term care for the elderly; access for America's children with rare and/or serious health problems to pediatric specialists, medications and clinical trials; adequate protection for human research subjects; and enhanced protection of confidential medical records. These matters warrant attention too.

Mr. BILIRAKIS. Dr. Strandberg, again our gratitude for yielding to Dr. Goodall and for being here. Dr. Strandberg is the director of comparative medicine with the National Center of Research Resources, National Institutes of Health. Your testimony is very significant to what we are trying to do here today. Sir, we have set this at 5 minutes but obviously I will not cut you off. Please proceed.

STATEMENT OF JOHN STRANDBERG, DIRECTOR OF COMPARATIVE MEDICINE, NATIONAL CENTER FOR RESEARCH RESOURCES, NATIONAL INSTITUTES OF HEALTH

Mr. STRANDBERG. Mr. Chairman, and members of the committee, thank you very much. You have given my background and my current position, so I won't reiterate that.

When I joined the NIH in 1998, just a bit over 2 years ago, one of my priorities was to develop a trans-NIH plan to address how to optimize the care and the use of chimpanzees in federally funded biomedical research. I welcome the opportunity to speak to you today about the contributions that chimpanzees make and have made in selected areas of biomedical research and why this research is important to the public and its health. In addition, I will address NIH's continuing efforts to ensure that the chimpanzees used in biomedical research do receive proper care and monitoring. Let me assure you that the NIH takes very seriously its responsibility for the health and welfare of research animals of all types and that of the people who care for them.

Animal-based research continues to be a highly productive and valuable approach to solving human health problems and to controlling devastating and debilitating diseases. For example, polio vaccine was developed and safety tested using monkeys. We would not have a vaccine against polio at this time without monkeys.

Animal models have also provided critical information for the development of treatments for cancer, cardiovascular diseases and a host of others. Significant challenges remain however in the fields of organ transplantation, inherited diseases, and infectious diseases, including HIV and hepatitis C.

There are numerous instances in which only non-human primates and man's most closely related species, the chimpanzee, can provide solutions to important human diseases. Recent examples of these include the successful development of a vaccine against hepatitis B. Ongoing efforts are trying to develop vaccines for other infectious diseases such as hepatitis C, which is extremely important in this country, as well as respiratory syncytial virus or, RSV, the most common cause of respiratory infections of infants and young children. Both of these infections cause significant morbidity and mortality in this country.

The NIH currently has title to approximately 600 chimpanzees. As noted, there are approximately 1600 chimpanzees in this country that have participated in biomedical research. However, not all these chimpanzees fall under the purview of the Public Health Service. Some have participated in research conducted in the private sector principally by the pharmaceutical industry. We estimate that approximately 500 research chimpanzees have been exposed to or are chronically infected with agents transmissible to humans. These chimpanzees have unique health care requirements, impose hazards to their caretakers and to other unexposed animals in their colonies. Thus, we believe their care must be provided by individuals with knowledge and expertise specific to their medical histories. As noted, chimpanzees are highly complex animals with housing requirements reflecting their mental abilities, their physical strength, and the inter-animal interactions. These requirements are very specialized and costly to deal with.

In response to the AIDS epidemic, a chimpanzee-breeding program was established in 1986 as has been noted. However, researchers found that although the chimpanzee can be infected with HIV, the development of clinical AIDS occurs in chimpanzees late or not at all. Thus, by the 1990's, concerns were raised about an apparent surplus of chimpanzees. In response to a request from the NIH, a National Academy of Sciences panel produced a series of recommendations and the NIH has taken several concrete steps to address them. These recommendations form the basis of the chimpanzee management program that has been implemented by the National Center for Research Resources at NIH.

The chimpanzee management plan includes an advisory body of independent research scientists from outside the NIH with expertise in ethics, animal behavior, veterinary medicine and genetics to discuss and resolve issues related to chimpanzees that have participated in biomedical research.

In accordance with the National Academy Panel recommendations, the NIH has implemented a breeding moratorium on NIH supported chimpanzees. In fact, a breeding moratorium actually began 2 years before the report was officially issued, as well as a policy that rules out euthanasia as a method of population control. To provide high quality care while conserving resources, the NIH will consolidate its existing five chimpanzee facilities into two sites. In addition, an improved data base of all chimpanzees that have participated in research will allow us to track animals more efficiently over time and to plan for needed resources. The NIH must also consider biomedical researchers' needs to monitor animals that have been the subject of research in the past. Followup is needed to gain further information from the research in which they have participated. Much of these data can be gathered through minimally invasive procedures, such as blood draws and urine collection, as has been noted. In addition, it is important to conduct post-mortem examinations on those that die.

No one can tell what the future will bring. At some future point in time, a scientist might discover a treatment that could potentially eradicate HIV and hepatitis virus from the infected individuals and develop a candidate hepatitis vaccine. It would be very unfortunate if we did not have access to animals with long-term infections to assess new treatments and vaccines. Not only would this be poor stewardship of our Federal investment in these animals, but it could have a substantially negative impact on the health of the animals and the chimpanzees. Thus, NIH believes it would be a mistake to establish sanctuaries for research chimpanzees that would make them permanently unavailable for study or monitoring.

The NIH, however, would be pleased to work with the Congress to enhance the existing network of long-term care facilities for chimpanzees used in biomedical research that will allow such animals to remain the subject of further scientific inquiry should a future need arise. Sometimes there are situations that require immediate attention. The NIH recognizes the need for vigilance, flexibility, and action when problems present themselves.

This is the case with the Coulston Foundation. The Coulston Foundation is the largest chimpanzee facility in the world with ap-

proximately 600 animals. Let me make it very clear that we are extremely concerned about the health and welfare of these animals and have provided the Coulston Foundation with funds to assure the care and feeding of these animals through closely monitored administrative supplements. I must stress that there is no other facility where these animals could currently be relocated.

The NIH has also worked closely with the USDA and the Coulston foundation to identify, mitigate, and correct problems which are identified. NIH has conducted regular site visits during the past year. I recently participated in such a site visit, and at that time, witnessed no evidence of significant hazards to the chimpanzees. This is our major concern at this point. The NIH has recently taken title to 288 chimpanzees at the Coulston Foundation, all of which have participated in biomedical research and are infected with HIV and/or hepatitis C.

At the same time, the NIH has announced that we will issue a request for proposals for the operation and maintenance of a long-term care facility for these animals located at the Holloman Air Force base. In summary, the NIH recognizes that both research ethics and good stewardship of public funds require us to attend to the care of the chimpanzees currently or formally used in biomedical research. We will continue to use our resources and leadership to promote the health and welfare of chimpanzees used in such research and to ensure that appropriate continuing care is provided to those chimpanzees for which we are responsible.

Thank you for giving the NIH the opportunity to testify on this very important topic. I would be pleased to address any questions that you may have at this time.

[The prepared statement of John Strandberg follows:]

PREPARED STATEMENT OF JOHN STRANDBERG, NATIONAL CENTER FOR RESEARCH
RESOURCES, NATIONAL INSTITUTES OF HEALTH

Mr. Chairman and Members of the Committee, I am Dr. John Strandberg, Director of the Comparative Medicine area of the National Center for Research Resources at the National Institutes of Health (NIH). I joined NIH in 1998 from Johns Hopkins University School of Medicine where I directed the comparative medicine program. One of my priorities on arriving at NIH was to develop a trans-NIH plan to address how to optimize the care and use of chimpanzees in federally funded biomedical research. I welcome the opportunity to speak with you today about the contributions chimpanzees make in selected areas of biomedical research and why this research is important to the public and its health. In addition, I will address NIH's continuing efforts to ensure that chimpanzees used in biomedical research receive humane treatment and monitoring.

Let me assure you that NIH takes very seriously its responsibility for the health and welfare of research animals of all types and that of the people that care for them, whether directly through an intramural program or in partnership with extramural organizations.

Chimpanzees and Research

Animal-based research continues to be a highly productive and valuable approach to solving human health problems. We have discovered the means of controlling devastating and debilitating diseases using vaccines developed and tested in animals. The polio vaccine is one of many examples that might be cited; this vaccine was developed using monkeys, and the safety testing of vaccines was done in monkeys for many years. Animal models have provided critical information in the development of treatments for cardiovascular diseases, such as hypertension and cardiac arrhythmias. Significant challenges, however, remain in the fields of organ transplantation, inherited diseases, and infectious diseases, including HIV and hepatitis C. Animal-based research will continue to play an important role in meeting the scientific and public health challenges that lie ahead.

Although there are striking similarities between the physiological systems of humans and various species of other animals, there is no single animal species that is appropriate for the study of all diseases. For example, much of what we know about the immune system has come from studies with mice, and much of what we know about the cardiovascular system has come from studies using dogs. There are numerous instances in which only nonhuman primates and man's most closely related species, the chimpanzee, can provide the solutions to important human diseases. Recent examples of these include the development of a vaccine against hepatitis B virus. Ongoing efforts are trying to develop vaccines for other infectious diseases, such as hepatitis C (HCV) and respiratory syncytial virus (RSV), the most common cause of respiratory tract infections (pneumonia and bronchiolitis) in infants and young children. Both infections cause significant morbidity and mortality in this country.

Chimpanzees are the only animal, other than man, that can be infected with human immunodeficiency virus (HIV). For this reason, it was hoped that they could provide information on the progression from HIV infection to AIDS and in the development of treatments and vaccines. However, despite the fact that chimpanzees become persistently infected with HIV, we found that the development of clinical AIDS occurs in chimpanzees late or not at all. Studies using chimpanzees have produced a cohort of several hundred animals that have been exposed to viruses, with many persistently infected with hepatitis C and HIV. These chimpanzees have unique health care requirements and pose hazards to their caretakers, to other unexposed animals in their colonies, and to the public. Thus, we believe that their care must be provided by individuals with knowledge and expertise specific to their medical histories.

The NIH currently has title to approximately 600 chimpanzees. There are approximately 1,600 chimpanzees in this country that have participated in biomedical research. However, not all these chimpanzees fall under the purview of the Public Health Service as some have participated in research conducted in the private sector, principally by the pharmaceutical industry. We estimate that approximately 500 chimpanzees that have been used in research have been exposed to or are chronically infected with agents transmissible to humans.

Chimpanzees are highly sophisticated animals with housing requirements reflecting their mental abilities, physical strength, and inter-animal interactions. Their housing requirements are extensive, specialized, and costly. Construction of new facilities therefore often takes considerable time and resources.

NIH Chimpanzee Management Program

The NIH has always monitored the use and humane treatment of chimpanzees in biomedical research which it sponsors, because chimpanzees constitute a valuable and scarce research resource. In response to the AIDS epidemic, the Chimpanzee Biomedical Research Program was established in 1986. However, researchers found that the chimpanzee model was not capable of answering some research questions, and by the 1990's, concerns were raised about the apparent surplus of chimpanzees. In response to a request from the NIH, a National Academy of Sciences (NAS) panel reviewed this issue and produced a series of recommendations. These recommendations form the basis of the Chimpanzee Management Program (ChiMP) that has been implemented by the National Center for Research Resources at NIH. The ChiMP includes an advisory body of independent research scientists to discuss and resolve issues related to chimpanzees that have participated in biomedical research. This advisory group is composed of scientists from outside the NIH with expertise in animal behavior, veterinary medicine, and genetics. The group advises the NIH on many issues, including the development of programs for long-term care of chimps and their use in research.

Also, in accordance with the NAS panel recommendations, the NIH has implemented: (1) a breeding moratorium on NIH-supported chimpanzees (which the NIH actually began two years before the report was issued), and (2) a policy that rules out euthanasia as a method of population control. The NAS panel proposed a core population of 1000 federally owned chimpanzees to meet research needs. That number seems to be a bit high today, given limitations of the chimpanzee model in AIDS research, and is under consideration by the ChiMP advisory group. To provide high-quality care while conserving resources, the NIH will consolidate its five existing chimpanzee facilities into two sites. At the beginning of the next fiscal year, we expect to make the awards to the entities that will operate these two facilities. These sites are critical to the placement and humane care of chimpanzees that have participated in research. Successful applicants will have proven expertise in long term housing and humane care of chimpanzees in biomedical research. In addition, a five-year grant was funded in March 2000 to provide an improved database of all chim-

panzees that have participated in research. This will allow us to track animals more efficiently over time and to plan for resources needed.

In addition to long-term care and housing needs for the chimpanzees, the NIH must consider biomedical researchers' need to monitor animals that have been the subject of research in the past. Follow-up is needed to gain further information from the research in which they participated. Much of the data needed can be gathered through minimally-invasive procedures, such as blood draws and urine collection. In addition, we would also want to conduct post-mortem examinations of those that die.

No one can tell what the future will bring. At some future point in time, a scientist might discover a treatment that could potentially eradicate all HIV from infected individuals, develop a candidate hepatitis C vaccine, or discover a means of eradicating persistent hepatitis infection. It would be very unfortunate if we did not have access to animals with long-term infections to assess new treatments and vaccines. Not only would this be poor stewardship of our Federal investment in these animals, it could have a substantial negative impact on the health of humans and chimpanzees.

Thus, NIH cannot support proposed legislation that would require it to establish sanctuaries for chimpanzees and would make the animals permanently unavailable for study or monitoring. The NIH, however, would be pleased to work with the Congress to enhance the existing network of long-term care facilities for chimpanzees used in biomedical research, which will allow such animals to remain the subject of scientific inquiry should a future need arise. In recognition of this need, the NIH has taken the initiative to enlarge and improve housing facilities for NIH-supported chimpanzees at two chimpanzee facilities. These activities will serve as the basis for responding to the NAS recommendations as well as our mutual concerns about the health and welfare of chimpanzees used in research.

Chimpanzee Management: Current and Future Challenges

The continuing use of chimpanzees in NIH-sponsored biomedical research is subject to extensive oversight at the level of the Office of the Director. The Interagency Animal Models Committee reviews all federally supported research protocols that propose using chimpanzees to promote the conservation and care of chimpanzees when this species is the best or possibly the only model for conducting the research.

And, as noted above, the NCCR's ChiMP plan is in place. But sometimes there are situations that require immediate attention. The NIH recognizes the need for vigilance, flexibility, and action when problems present themselves. This is the case with the Coulston Foundation. The Coulston Foundation is the largest chimpanzee facility in the world, with approximately 600 animals. The NIH has provided support to ensure the humane care and feeding of the animals through closely monitored administrative supplements to cover additional expenses within the scope of the existing grant. Since February 22, 1999, the Coulston Foundation has received supplements of \$399,946 from the National Center for Research Resources (NCCR) and \$700,000 from other NIH components.

The NIH is aware of shortcomings at the Coulston Foundation and has worked closely with the USDA and the Coulston Foundation to identify, mitigate, and correct identified problems. Furthermore, the NIH has conducted regular site visits. I recently participated in a site visit and witnessed no evidence of significant hazards to the chimpanzees. The NIH will, of course, continue to monitor the Coulston Foundation facility.

The NIH has recently taken title to 288 chimpanzees at the Coulston Foundation, all of which participated in biomedical research and are infected with HIV and/or hepatitis C, to ensure their continued care and well-being. At the same time, the NIH has announced through the *Commerce Business Daily* that we will issue a Request for Proposals (RFP) for the operation and maintenance of a long term care facility for these animals. Like all other NIH solicitations, this will involve a competitive process. Applications will be solicited and subject to peer review. An award will be made to the most highly qualified applicant, with expertise in both care of chimpanzees that have participated in research and in administrative and financial operations necessary to run a stable organization to care for those animals. We expect to award that new contract at the end of the summer when the cooperative agreement with the Coulston Foundation expires. The applicants will need to demonstrate expertise in caring for HIV and hepatitis C infected chimpanzees as well as financial stability and administrative acumen in managing and operating a long term care facility for chimpanzees.

Conclusion

In summary, the NIH recognizes that both good research ethics and responsible stewardship of public funds require us to attend to the humane care of chimpanzees currently or formerly used in biomedical research. We will continue to use our resources and leadership to promote the health and welfare of chimpanzees used in such research, and to ensure that the highest level of continuing humane care is provided to those chimpanzees for which we are responsible.

Thank you for giving NIH the opportunity to testify on this important topic. I would be pleased to answer any questions that you may have at this time. Thank you.

Mr. BILIRAKIS. Dr. Strandberg, I have heard your testimony. Would you say that legislation such as H.R. 3514 would undermine any ongoing research studies as now written?

Mr. STRANDBERG. It is unclear which animals would go into the colonies that are proposed. As I noted, the concern that we have is with animals that are persistently infected; this makes them hazardous to other animals and to their caretakers and thus it is difficult to see how a sanctuary that is outlined could cope with that.

Mr. BILIRAKIS. Well, you heard Dr. Goodall's testimony, of course, and you heard her response to my specific question at the tail end there. Would NIH support chimpanzee sanctuaries if they are done so under guidelines developed by scientists in consultation with animal rights groups so that chimpanzees could, under limited circumstances, be recalled?

Mr. STRANDBERG. As I said, NIH will support facilities which would provide long-term care for chimpanzees that have been used in biomedical research. I think it is important that these facilities have many of the characteristics that have been outlined; that they provide exercise, very good environmental enrichment, as well as chances for animals to interact with one another insofar as their health status permits.

Mr. BILIRAKIS. Do you know if NIH has any suggested wordage that might be, to your suggestion, become a part of this legislation?

Mr. STRANDBERG. I don't know at this time. We could certainly work at providing that back to the committee.

Mr. BILIRAKIS. I think it is important we work together. Nobody knows what the future of this legislation is going to be considering this year, being such as it is but it is important that we work together.

There is a surplus of chimpanzees, is there not?

Mr. STRANDBERG. There are many chimpanzees that are not currently being used in biomedical research, at least research that is funded by the Federal Government.

Mr. BILIRAKIS. Mr. Green to inquire.

Thank you, sir.

Mr. GREEN. Thank you, Mr. Chairman.

Dr. Strandberg, according to the National Research Council there are about 1500—is that a pretty good estimate—chimpanzees housed in our five biomedical institutions?

Mr. STRANDBERG. That is correct. It may be closer to 1600 but that is about what it is.

Mr. GREEN. Later in the report it recommends that NIH in its ChiMP program assume ownership or lifetime care for about a thousand of these?

Mr. STRANDBERG. That is in the report. At the time that that report was put together, this was the recommendation made by the National Research Council. We have, as I mentioned, an advisory committee which continues to monitor the ongoing use and needs for chimpanzees. They had revised that figure down to 600, but it is a figure which is constantly under revision and being looked at as needs and circumstances change.

Mr. GREEN. But using their numbers, and again, even though they may not be updated, that would still leave about 500 chimpanzees in other facilities that are not government-owned, or not controlled by the government?

Mr. STRANDBERG. That is right. As I pointed out, the Federal Government owns only about 600 of the total chimpanzee population.

Mr. GREEN. And then the report breaks down that 1,000 chimps in research, the 360 posing a potential health threat, the 260, those needed as crisis breeding models and 168—it is about 788 total, I guess. Again, these numbers I know—we deal with numbers up here, and they change every minute much less every day. The NRC's conclusions that thus 212 of the 1,000 animals may be released to the public sanctuaries or long-term care facilities, again, is there a number that is close to that or maybe more or less?

Mr. STRANDBERG. To give you an example, as you noted, the anticipated number of persistently infected animals or exposed animals is already considerably higher than was estimated by the National Research Council, and this is one of the factors that we are taking into consideration. So it is really impossible for me to guess how many would be in this unexposed population of animals that pose no hazard to the people who would be caring for them.

Mr. GREEN. I guess it seems like with the legislation, it seems like we could work together between permanent chimpanzee retirement and the ongoing biomedical research needs and since the researchers are the ones who are making those decisions, we could have a balance that we could still meet the need and still create a retirement facility.

Mr. STRANDBERG. As I said, the NIH is very happy to work together with the Congress to come up with a solution to a very significant problem.

Mr. GREEN. Last week the NIH took title to 288 of the Coulston chimpanzees, and what was the reason for the taking the title back?

Mr. STRANDBERG. These animals have, as I mentioned, been infected with hepatitis—several types actually—as well as HIV in varying numbers. Many of these animals have been used in studies by NIH supported investigators, both people from the intramural community as well as by grantees. NIH has thus acquired a responsibility to these animals, and it was felt appropriate for NIH to own them so that we have more control over them.

Mr. GREEN. When you say “own them,” you took title to them, but are they still in the facilities?

Mr. STRANDBERG. Yes as I mentioned they are still in the facilities because frankly there is no other place to put these chimpanzees.

Mr. GREEN. That answers one of the questions, the concern over the controversy over the Coulston Foundation and the treatment. The NIH took title based on the infection and not based on the treatment of these animals?

Mr. STRANDBERG. As I mentioned during my testimony, we have been made aware of problems at the Coulston Foundation. They are certainly not a secret. We have been working very closely with the Department of Agriculture which has legal authority to monitor laboratory animal care and with the people of the Coulston Foundation to help assure that these animals continue to receive appropriate daily care.

Mr. GREEN. So those 288, they will still be at the Coulston, but they will be used in active research or followup research?

Mr. STRANDBERG. It is a combination of active research and long-term monitoring; the minority are in active research protocols.

Mr. GREEN. What type of research?

Mr. STRANDBERG. This is research related to the development of vaccines against hepatitis C as well as long-term monitoring of animals that have been infected with HIV or with both agents.

Mr. GREEN. I guess the last question, Mr. Chairman, I know I am almost out of time. What steps are being taken to ensure that the 288 chimpanzees now owned by NIH but still in possession of Coulston are receiving the care in accordance with the Animal Welfare Act.

Mr. STRANDBERG. As I say, we are monitoring this very closely. We have regular site visits which are paid by NIH staff, to the Foundation and also because of the problems that have occurred at the Foundation, the Department of Agriculture is monitoring them on a very frequent basis as well.

Mr. GREEN. How frequently are they monitored?

Mr. STRANDBERG. The NIH is monitoring them, I believe, it is every month.

Mr. GREEN. So there is no NIH personnel actually at the Coulston facility?

Mr. STRANDBERG. There is no one stationed at the Foundation constantly, correct.

Mr. GREEN. Will the permanent retirement of these 288 that are not—part of that 288 that are not part of the ongoing research be an option under NIH's forthcoming request for proposals under which a contract for care of the chimps would be awarded?

Mr. STRANDBERG. As I mentioned, these animals that are persistently infected would offer an opportunity to come up with mechanisms to cure or to clear viral infections. Hepatitis C is widely spread among the human population, is a chronic infection, and it is associated with a disease that occurs much later in life. If these animals, which already have been infected, can provide some guidance as to how to clear the infection and thus stop the long-term chronic effects of this infection, it would be to the animal's benefit as well as to human benefit, and would also make use of any resources that have already been established.

Mr. GREEN. I guess what I was trying to do is break down the number of that 288, the ones that were active research and the ones that maybe would be in a continuing monitoring stage compared to their infection.

Mr. STRANDBERG. That would have to be ascertained on an individual animal basis based on the records of what their past—

Mr. BILIRAKIS. If the gentleman would yield. You referred to the monitoring. Is that monitoring that you have both spoken about here research-related?

Mr. STRANDBERG. They are monitoring the—the research that is being done there is being done under protocols that have gone through peer review and are NIH-funded. So the protocol itself has been approved. It has standard procedures that are being followed. The monitoring that is taking place out there now is specifically looking at the welfare of the animals, the conditions under which they are housed, making sure that their diet—

Mr. BILIRAKIS. Not directly research related?

Mr. STRANDBERG. That is correct.

Mr. GREEN. Thank you.

Mr. BILIRAKIS. Mr. Greenwood to inquire.

Mr. GREENWOOD. Thank you, Mr. Chairman. Mr. Chairman, I would ask unanimous consent to enter into the record an article published in The Washington Post on Monday May 15, 2000, the title headline, “Surplus Chimps Stranded in Research Controversy.”

Mr. BILIRAKIS. Without objection, that will be the case.

[The information referred to follows:]

[Monday, May 15, 2000—Special to The Washington Post]

SURPLUS CHIMPS STRANDED IN RESEARCH CONTROVERSY

By Shannon Brownlee

Deep in the New Mexico desert, there's a state-of-the-art facility at Holloman Air Force Base. It does not house fighter jets, but instead serves as home to about 300 chimpanzees.

The animals make up about half of the chimps owned by the Coulston Foundation, the largest primate research laboratory in the world.

The Alamogordo, N.M., facility has long been embroiled in controversy, having been repeatedly accused of mismanaging the care of the animals in its custody.

Since 1995, the Agriculture Department, one of the federal entities charged with ensuring the safety and welfare of animals used in biomedical research, has investigated and brought charges against Coulston's lab on three occasions for violations of the Animal Welfare Act, ranging from inadequate veterinary care to negligence resulting in the deaths of at least nine chimpanzees. Another investigation is underway.

The controversy came to a head last week, when the National Institutes of Health took title to 288 chimpanzees at the facility.

Given the foundation's record, relieving it of half of its chimps might seem like a good idea. But instead of relief, there was frustration among many, including animal welfare advocates, federal officials and the directors of other primate laboratories.

That's because, despite the NIH action, the animals remain at the facility. And there's nowhere else to send hundreds of other animals around the country that are no longer needed for research.

The NIH has funneled at least \$10 million into the Coulston Foundation since 1993, despite the charges leveled at Coulston's facility by other federal agencies. Some researchers, as well as animal advocates, believe that the NIH has been propping up the troubled lab because the agency does not want to deal with a larger issue: what to do with several hundred chimpanzees that are no longer needed for biomedical research.

“If these were mice, there wouldn't be a problem,” says Tom Gordon, interim director of the Yerkes Regional Primate Research Center at Emory University in Atlanta, one of several facilities that has more chimps than it needs.

The glut of chimps began in 1986, when the NIH and other federal agencies launched a breeding program to ensure there would be enough animals for research, particularly AIDS studies. By the time the agencies realized that chimps were not

good models for AIDS, there were approximately 1,800 of them scattered in half a dozen U.S. labs. At the same time, money for chimp research and the animals' long-term care was evaporating. Keeping a chimp in a research lab can cost as much as \$1 million over the animal's 50-year life span.

The NIH, however, has expressed little interest in retiring any chimps permanently, especially to sanctuaries that would be run by animal advocates. NIH officials worry they won't have ready access to animals should they be needed for research. "God knows what disease is going to pop up next," says John Strandberg, director of comparative medicine at the National Center for Research Resources, a division of NIH that paid for chimpanzee breeding. Yet many animals are infected with either HIV, the virus that causes AIDS, hepatitis, or both, making them unsuitable for experiments involving other diseases.

Enter the Coulston Foundation, which by 1995 had acquired 650 chimpanzees at a time when other laboratories were looking to unload them. By then, Coulston had obtained the lease to the \$10 million facility at Holloman, where more than 100 descendants of the "space chimps" used in NASA tests in the 1960s were housed.

The foundation ran into trouble from the start. Three chimps died when a heater in their room malfunctioned and pushed the temperature to 140 degrees. Four years later, a 2-year-old chimp named Echo died during an operation performed by inexperienced veterinarians.

By the time the foundation had agreed to relinquish its animals in an agreement with the Agriculture Department last September, the Coulston facility had been charged with negligence in the deaths of nine chimps and four monkeys. In each case, Coulston agreed to pay fines while admitting no wrongdoing. Officials are investigating the deaths of more chimps, according to In Defense of Animals, an advocacy group.

Through it all, the NIH has maintained that it had no cause for concern. Last week, Strandberg blamed Coulston's troubles on bad public relations. "If you look at USDA concerns, they are looking at wall surfaces, and record-keeping," he said.

But internal NIH documents show that the agency has long been aware of far more serious problems and ignored them, according to animal welfare advocates.

In February 1988, the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC) inspected the Coulston facility. AAALAC accreditation is one way a lab can demonstrate it is caring for animals properly to obtain federal funding. Another is for the lab to ensure the animals' welfare through an internal committee that reviews all experiments.

The foundation, which has been chronically short of cash, failed on both counts. It was rejected by AAALAC in 1998. In 1999, the Food and Drug Administration and then the Agriculture Department found serious fault with the foundation's review committee, saying it was simply rubber-stamping experiments, including at least one that was likely to lead to long-term injury to animals. Problems with the committee, said Don McKinney, a Coulston spokesman, were "corrected immediately."

According to In Defense of Animals, NIH funding of Coulston violated federal law and U.S. Public Health Service policy. Without AAALAC accreditation, or a functioning review committee, In Defense of Animals says, federal law states that the NIH director "shall suspend or revoke" funding. Yet since last year, the NIH has awarded the lab at least \$2.8 million in "supplemental awards" and research contracts. In a written statement, a spokesman for the NIH said that Coulston can continue receiving funds because "in each instance [of] noncompliance . . . corrective action has been taken."

Events came to a head late last month, when animal advocates came to Rep. John Edward Porter (R-Ill.), a staunch NIH supporter, with a plan to take over half of Coulston's chimps and turn the facility at Holloman into a sanctuary. The NIH rushed to take possession of the chimps last week.

The agency does not yet know how it will care for the animals. It also does not have a new management team in place, leaving Coulston in charge in the interim.

The NIH move also throws into question the fate of several hundred other chimps. In response to recommendations by the National Academy of Sciences, the NIH adopted a Chimp Management Plan, which calls for \$4.2 million a year to care for 600 chimps. Strandberg said the 288 animals obtained from Coulston will be part of that plan, which several lab directors hope will take care of their surplus animals. The Yerkes center, for example, needs a home for nearly 100 chimps. Another NIH spokesman said money for the Coulston animals will come from other sources.

On Thursday, the House Commerce subcommittee on health and environment will hold a hearing on surplus chimps. Animal advocates, including famed primate researcher Jane Goodall, who is scheduled to testify, support retiring surplus animals permanently in sanctuaries. Some scientists have come to agree. "Going from crisis

to crisis is not ideal,” said Gordon, the Yerkes center director. “We need a national plan.”

Mr. GREENWOOD. Dr. Strandberg, according to this article, since 1995, the Agriculture Department, one of the Federal entities charged with ensuring the safety and welfare of animals used in biomedical research, has investigated and brought charges against Coulston’s lab on three occasions for violations of the Welfare Act ranging from inadequate veterinarian care to negligence resulting in the deaths of, at least, nine chimpanzees. Other investigation is underway. You have said in your testimony this morning, the NIH is aware of shortcomings at the Coulston Foundation and have worked closely with the USDA and the Coulston Foundation to identify, mitigate and correct identified problems. I am not clear yet whether NIH took title to these chimpanzees because, strictly, because of medical protocols or whether because of concerns about whether or not they are being treated humanely? Which is it?

Mr. STRANDBERG. We took title to the animals for a variety of reasons including our ability to make sure that they are, in fact, humanely cared for as well as their research potential.

Mr. GREENWOOD. Was it your observation that they weren’t?

Mr. STRANDBERG. No, but we wanted—because of the financial instability of the Coulston Foundation, we wanted to provide some assurance that this would not affect the well-being of the animal.

Mr. GREENWOOD. We have paid them about a million dollars in Federal money, have we not?

Mr. STRANDBERG. We have indeed. And we have done that in a way that has been very closely monitored to make sure the animals’ welfare is being protected.

Mr. GREENWOOD. I still am not clear. You said you took them for various reasons. One of them is medical protocol. The other is to ensure their humane treatment but you are saying you are not aware of inhumane treatment of the animals in Coulston’s facility.

Mr. STRANDBERG. We have looked—we have been made aware of the USDA’s concerns and have worked with them and with the Coulston Foundation to make sure that whatever caused these does not recur and to—

Mr. GREENWOOD. Whatever caused these what? “these” refers to what?

Mr. STRANDBERG. Whatever caused the problems that the Department of Agriculture identified.

Mr. GREENWOOD. They considered it violations of the Animal Welfare Act. It is pretty obvious what their concerns were. You are recorded as saying through it all, the NIH has maintained that it had no cause for concern last week. Strandberg blamed Coulston’s troubles on bad public relations. Is that your view?

Mr. STRANDBERG. The quotations that are ascribed to me there are correct. However, they were taken out of context and in the course of the 45-minute interview.

Mr. GREENWOOD. I am sympathetic. That happens to me all the time. Probably will happen to me before the day is over.

I also, Mr. Chairman, would like unanimous consent to insert into the record a “New York Times” article of September 14, 1999, entitled “Foundation Gives Up 300 Research Chimps.”

Mr. BILIRAKIS. Without objection.

[The information referred to follows:]

[September 14, 1999—The New York Times]

FOUNDATION AGREES TO GIVE UP 300 CHIMPS

By Shannon Brownlee

The caretaker of the nation's largest colony of research chimpanzees has agreed to give away almost half of them in an unusual negotiation with the United States Department of Agriculture, one of the Federal agencies that monitors the safety and welfare of research animals.

The settlement, announced on Sept. 1, stemmed from charges that Frederick Coulston, operator of the Frederick Coulston Foundation, violated animal welfare regulations when five chimps died in his care. The settlement ordered the foundation to turn over 300 of its 650 chimps to other centers by January 2002.

"This is an unprecedented consent agreement, and a big win for these magnificent animals," said Michael Dunn, an Under Secretary of Agriculture.

The department does not normally enter into settlements of this kind unless it believes the animals are in danger.

The action is the latest in a series of charges leveled at the foundation in Alamogordo, N.M. Since 1996, the department has investigated and brought charges in the deaths of at least nine chimps at Mr. Coulston's center, and has levied fines for violations ranging from keeping the animals in cages too small—no bigger than a public bathroom stall—to inadequate veterinary care.

Through it all, Mr. Coulston has denied any wrongdoing, even as he has paid the fines. The accusations have come not only from the Department of Agriculture, but also from animal-protection advocates and biomedical researchers, who say that Mr. Coulston is a throwback to the days when research animals were treated with callous indifference.

Mr. Coulston has called chimpanzees "vicious, aggressive animals" and has suggested that "you can raise them like you do cattle," and that they could be used as blood donors for humans.

But chimps are disconcertingly similar to people in many of their habits and needs, a fact that has helped place them at the center of increasingly explosive political and ethical controversy over what to do with the nation's 1,800 research chimpanzees.

Beginning in the 1980's, the National Institutes of Health and other Federal agencies began a breeding program aimed at insuring that enough chimpanzees would be available for biomedical research, especially for AIDS.

The program led to a chimp baby boom at time when many researchers were concluding that the animals were not good models for AIDS research.

Now, most of those chimps are no longer needed for federally financed experiments and money for their long-term care has dried up.

"We could always find people who wanted to infect chimps," said Preston Marx, senior scientist at the Aaron Diamond AIDS Research Center in Manhattan and professor of tropical medicine at Tulane University Medical Center, who ran a chimpanzee colony in the early 1990's. "But not people to take care of them for 45 years."

Many researchers, including a panel formed in 1994 by the National Research Council, believe the National Institutes of Health should take responsibility for the chimps and retire most of them to sanctuaries.

Dr. Thomas Wolfle, a former director of the National Research Council's Institute for Laboratory Animal Research and member of the task force, said the National Institutes of Health was "morally responsible" for the welfare of the animals.

"I think they should just bite the bullet and assume lifetime care for animals they bred and move some out of active research," Dr. Wolfle said.

The agency has shown little interest in the idea. But just how many chimps the agency should support and whether any of them should be retired from research are matters of dispute. Providing for retirement of animals, said Dr. John Strandberg, director of comparative medicine at the National Center for Research Resources, is "not in the plans for the moment."

Mr. Coulston and his colony of chimps, one of five federally financed chimp centers in the United States, has served as a lightning rod for the debate over what to do about surplus chimps. In 1993 he took over a large colony of primates, including several hundred chimps, from New Mexico State University.

Within weeks, three chimpanzees were found dead, after a heater in their room sent the temperature soaring overnight to 140 degrees Fahrenheit.

Mr. Coulston was charged with violating the Animal Welfare Act, the law that governs the treatment of research animals, in connection with the overheating and other problems at the site.

In March 1997, Echo, a 2-year-old female chimp, died after being operated on by two inexperienced veterinarians. In early 1998, a chimp named Holly died from preventable side effects of a drug that was being tested at the foundation. Two more chimps died from the same cause in June 1998. The most recent death, during a spinal experiment, occurred in May. The Agriculture Department, partly as a result of investigations by an animal protection advocacy group, In Defense of Animals, filed charges in 1997 and then again this year. Mr. Coulston agreed to pay fines but did not admit any wrongdoing.

Despite his troubles, Mr. Coulston had more than doubled the number of chimps in his care in the past decade, including more than 100 chimpanzees from New York University, which gave him the animals amid a swirl of controversy in 1997, along with more than \$1.75 million for their care.

Last year the Air Force sent him 111 of its chimpanzees, many of them descendants of the "space chimps" used in the 1960's to test the safety of space exploration.

According to the Department of Agriculture, part of the problem at the Coulston Foundation stems from inadequate veterinary care. Fourteen veterinarians have left the foundation since 1994, a high turnover rate. In the last two years, most of the foundation's veterinarians have had only minimal experience with chimps, according to In Defense of Animals.

Don McKinney, communications director of the foundation, said, "They have to get their experience somewhere." He added, "The reality is, there are not very many primate vets running around."

Despite the findings by the Agriculture Department, the National Institutes of Health has continued to support the Coulston Foundation with approximately \$10 million in contracts over the last six years. Late last year, Representative Carolyn B. Maloney, Democrat of New York, began questioning the agency about its support of the foundation.

But Dr. Wolfle and others say that without Federal money, Mr. Coulston would be unable to care for the chimpanzees.

Mr. Coulston's troubles highlight the financial straits that many primate colonies find themselves in: less and less money to care for their chimps.

The animals have been supported by a combination of Federal money and private contracts from drug and medical device companies, which pay primate centers to conduct research and to test drugs and devices.

Several Federal agencies, but mostly the National Institutes of Health, have paid to breed more chimps, and to infect many animals with H.I.V., the AIDS virus, and hepatitis. Now with the move away from using chimpanzees in AIDS research, many centers are scrambling to find the minimum \$15 a day that it costs to keep each primate.

Indeed, agricultural officials said worries about Mr. Coulston's finances prompted the agency to include a provision in their recent agreement allowing auditors access to his financial records.

In Defense of Animals said the foundation had lost 30 percent of its revenue between July 1997 and June 1998. Mr. McKinney of the foundation declined to respond.

The settlement between the foundation and the Agriculture Department also stipulates that a full-time consultant be brought in to act as a go-between, at Government expense, and insure that the foundation complies with the agreements.

"It's a last ditch effort to get him to clean up his act," Dr. Wolfle said.

The fate of the 1,200 research chimps in other primate centers is equally murky. In its 1997 report, the National Research Council urged the health institutes to set aside \$7 million to \$10 million for the care of 1,000 chimpanzees, about 600 of which the panel estimated would be needed for research. Part of that money would go toward placing the other 400 chimpanzees into sanctuaries. The panel also warned the institutes to move quickly to avoid the possibility that centers would have to start killing chimps because they could no longer care for them.

In response, the national institutes have started a Chimpanzee Management Plan, which by next summer will reduce the number of primate centers it supports to two from five.

The management plan has set aside \$4.2 million, enough to care for only 600 animals, most of which will continue to serve in research. That could leave many of the remaining chimps in the lurch. No one knows if there is enough private research money to support those chimps. And while animal welfare groups would like to see them put into sanctuaries, they do not have the money to do it.

Mr. GREENWOOD. Would you describe for us the conditions at the Coulston facilities? These chimpanzees, how are they being housed? How much space do they have? What are the conditions—what kind of enclosures are they in? How much time do they get to spend out of those enclosures?

Mr. STRANDBERG. There is a range of types of facilities at the Coulston Foundation. There are two major sites, one of which is on the Holloman Air Force base. The other—and this houses probably two-thirds—can house about two-thirds of their population. The other is at a facility called the Lavelle Road facility, which is owned by the Foundation. The facilities at the Air Force base were built within the past decade, I believe, or shortly before that on funds appropriated for New Mexico State University to put together a chimpanzee housing facility. It has extensive indoor/outdoor housing with cages that will house family groups as well as individuals. It also has an extensive nursery facility. The Lavelle Road facility is one that has a variety of animal housing areas. I would say almost all of them, if not all of them, have indoor outdoor access, and it has group housing facilities for animals that are compatible with one another.

Mr. GREENWOOD. You, in your testimony, also made reference to the fact that the NIH plans to issue a request for proposals for the operation and maintenance of a long-term care facility for these animals. An award will be made to the most highly qualified applicant with expertise et cetera. We expect to award a new contract at the end of the summer when the cooperative agreement with the Coulston Foundation expires. You are familiar with it because I think you have heard not only today's testimony, Dr. Goodall, but you follow this issue with the vision that Dr. Goodall and others have of what a facility looks like. Is that your vision of what you intend to seek through an RFP?

Mr. STRANDBERG. What we intend to seek with the RFP is to address the concerns of taking care of the infected animals that are at the facility at this point with a highly trained, highly competent and well respected animal care staff. The facilities, as I mentioned, have both indoor and outdoor enclosures which are highly enriched in many instances. There are some that are less enriched than others. The goal is to increase enriched housing. There is—it is New Mexico. There is not a lot of grass and there are not a lot of trees, but still the environment is an interesting and intellectually challenging one and there are ways of handling chimpanzees to improve their daily experiences.

Mr. GREENWOOD. You would like to live there, right?

Mr. STRANDBERG. I am from Minnesota—

Mr. GREENWOOD. What do you think the goal is? What is the difference between what Dr. Goodall—you described what you want to do with an RFP but what do you think it is that she would consider are the shortcomings of the facility that you will seek with this RFP?

Mr. STRANDBERG. I would hope in the final analysis she would not find too much problem with what we seek.

Mr. GREEN. Do you think we can—of course, one of the differences is, is that in my proposal, 71 of us, I think, have cosponsored it, we use private dollars as well as public dollars. You will

be using exclusively public dollars. Do you believe we can work this legislation to a point where we can get the NIH to support it to help set up this kind of a sanctuary program where we use private resources as well?

Mr. STRANDBERG. As I said, I would be very pleased—we would all be very pleased to work very closely to come up with a solution.

Mr. BILIRAKIS. The gentleman's time has expired. This might be a particularly good time to break, since Dr. Strandberg just made his opening statement. We have a couple of votes on the floor, so, Dr. Strandberg, thank you so much for being here. Obviously your written statement is a part of the record. As soon as we are able to return, we will go into the last panel. Thank you very much. I can't really estimate the time. Half-hour, 45 minutes.

[Brief recess.]

Mr. BILIRAKIS. We can get started. I was waiting for Mr. Greenwood because he wanted to introduce Ms. Nelson, and possibly when he gets her, we will give him his day in the sun. Let's proceed with panel 3. Dr. Alfred Prince, head of virology, Lindsley F. Kimball research institute, New York blood center. And Ms. Tina Nelson, executive director of the American antivivisection society out of Jenkintown, Pennsylvania, which I believe is Mr. Greenwood's district.

Ms. NELSON. Correct.

Mr. BILIRAKIS. Thank you both for being here. Your written statement is a part of the record and we will turn this at 5 minutes. Again, I want to apologize to you. Some of you—I don't think either of one of you—but some of our witnesses have testified here before and understand the way it is here. It is wild. We have votes on the floor and we have to run and interrupt everything. But Dr. Prince, why don't we start off with you, sir. Please proceed.

**STATEMENTS OF ALFRED M. PRINCE, HEAD OF VIROLOGY,
LINDSLEY F. KIMBALL RESEARCH INSTITUTE, NEW YORK
BLOOD CENTER; AND TINA NELSON, EXECUTIVE DIRECTOR
OF THE AMERICAN ANTIVIVISECTION SOCIETY**

Mr. PRINCE. Mr. Chairman, members of the committee, I can't resist first saying how honored I feel being able to testify on the same panel that Jane Goodall has testified on. Jane is the first human being to have understood chimps. Without her work and her understanding, we wouldn't be here talking today without any question.

I am head of the laboratory of virology at the Kimball Institute of the New York Blood Center. In addition, I also have, for the past 25 years, directed a chimpanzee research facility in Liberia, West Africa, one of the most peaceful parts of the world. During this time, I started as a virologist, but as the work went on, I became more and more a primatologist also, and I have learned from close experience of the mere human nature of these endangered animals and that it was absolutely essential for us in research that they be handled in a humane manner with respect for their social and physical needs. Thus whenever possible, even during research protocols, these animals need to be held in large social groupings with a maximum space and environmental enrichment.

My research concerns the development of vaccines and immunotherapies for hepatitis B and C viruses and is currently funded by the National Institutes of Health. Chimpanzees are essential unfortunately for progress in these fields of research because as said before at this meeting, they are almost identical to us biologically, and the viruses of great concern to us, hepatitis B, hepatitis C, and HIV do not replicate in other primates even. They don't replicate in monkeys, so we have to use chimpanzees for certain experiments. The studies for which these animals are involved usually have a duration of 1 or 2 years. After that time the animals must be resocialized into large groups and retired for the remainder of their 60- to 70-year life span.

In our laboratory in West Africa, we have used large islands in a nearby river for this purpose. The resocialization process is difficult and time consuming, thus once it is accomplished, we do not bring adult animals back into a research setting.

I believe it will be necessary for the research community to maintain a supply of chimpanzees for essential research needs and feel that the amount proposed for NIH to keep in the National Research Council report is quite sufficient to maintain a healthy surplus and breeding colony for future emergencies.

In addition, any chimpanzees kept by the NIH as surplus and for breeding I strongly believe should be maintained in a sanctuary setting for many of the same reasons highlighted in the legislation before this committee. Sanctuaries are cheaper, healthier and better for the breeding and the interests of the chimpanzees, since chimpanzees confined in most medical research facilities are not, to my mind, a suitable environment for breeding or for long-term holding.

In conclusion, Mr. Chairman, as a scientist, I strongly support H.R. 3514 and the necessity for permanently retiring all chimpanzees not needed for essential research to sanctuaries where they can live enriched and social lives. However, I would like to point out that I believe the present bill, valuable though it is, grossly underestimates the need. As I understand it, it addresses the need for somewhere around 200 chimpanzees. As we have heard by presentations given today, a much larger number of chimpanzees will have to go into sanctuaries and it could be as much as 1,800. 200 is just not sufficient. But it is much, much better than zero.

Thank you very much.

[The prepared statement of Alfred M. Prince follows:]

PREPARED STATEMENT OF ALFRED M. PRINCE, HEAD OF VIROLOGY, LINDSLEY F. KIMBALL RESEARCH INSTITUTE, NEW YORK BLOOD CENTER

I am the Head of the Laboratory of Virology of the Lindsley F. Kimball Research Institute of the New York Blood Center. In addition, I have also directed VILAB II, a chimpanzee research, and retirement facility in Liberia, West Africa for the past 25 years. During this time I have become convinced that the near human nature of these endangered animals requires that they be handled in a humane manner with respect for their social and physical needs. Thus, whenever possible these animals need to be held in large social groupings with a maximum space and environmental enrichment.

My research concerns the development of vaccines and immunotherapies for hepatitis B and C viruses, and is currently funded by the National Institutes of Health. Chimpanzees are essential for progress in this field of research. However, the studies in which these animals are involved usually have a duration of only 1-2 years.

After that time the animals must be resocialized into large groups and retired for the remainder of their 60-70 year life span. In our laboratory in West Africa we have used large islands in a nearby river for this purpose. The resocialization process is difficult and time consuming, thus once this is accomplished we do not bring animals back into a research setting.

I believe that it will be necessary for the research community to maintain a supply of chimpanzees for essential research needs and feel that the number of chimpanzees proposed to NIH in the NRC report is sufficient to maintain a healthy research and breeding colony for future emergencies. In addition, chimpanzees identified as surplus should also be maintained in a sanctuary setting for the same reasons highlighted in the legislation before this committee. Sanctuaries are cheaper and healthier and better.

In conclusion, Mr. Chairman, as a researcher I *strongly support* H.R. 3514 and the necessity of permanently retiring all chimpanzees not needed for this resource to sanctuaries where they can live enriched and social lives.

Mr. BILIRAKIS. Mr. Greenwood is now recognized to welcome Ms. Nelson.

Mr. GREENWOOD. Thank you. I apologize for being late for a moment there. As I said earlier, Mr. Chairman, it was impossible for me not to do whatever Jane Goodall asked me to, but it was a two-prong attack. They sent Tina Nelson to my home, who is a neighbor to my home office. Tina Nelson is currently the executive director of the American Antivivisection Society and the International Animal Protection Organization, which focuses on the issues related to the use of animals in laboratories and education.

Ms. Nelson also serves as a program consultant for the Alternatives Research and Development Foundation, one of the principal organizations in the United States supporting the development and use of humane alternatives. A significant portion of Ms. Nelson's time is spent working with the scientific community to implement improvements in the treatment of animals. She holds a bachelor of science degree in biology from Delaware Valley College of Science and Agriculture, and a master's of art degree in environmental science from Beaver College. She is currently enrolled in a doctoral program in political science at Temple University. Welcome.

STATEMENT OF TINA NELSON

Ms. NELSON. Thank you. I am very happy to be here and excited that we have movement on this and seem to have reached a consensus.

Mr. BILIRAKIS. Is there any significance to moving from those first two degrees to political science?

Ms. NELSON. Maybe.

Thank you for providing the American Antivivisection Society the opportunity today to testify on the ChiMP Act. As Congressman Greenwood said, I am Tina Nelson, executive director of the American Antivivisection Society and I am also here today representing the National Chimpanzee Sanctuary Task Force, comprised of four additional national animal protection organizations: The American Society for the Prevention of Cruelty to Animals, the National Antivivisection Society, Society for Animal Protective Legislation, and the Humane Society of the United States. Collectively, these organizations represent approximately 8 million constituents.

I would like to thank Congressman Greenwood for introducing this bill and for his commitment and support to solving a serious problem with positive action. I would also like to thank you, Mr.

Chairman, as well as several other members of the committee for supporting and cosponsoring this legislation.

This important issue has provided a unique opportunity for the animal protection community to work with the research community in creating a solution that benefits scientists, government, the U.S. taxpayer, and chimpanzees. Many in the animal protection community have received requests to assist in the retirement of chimpanzees. For example, the recent Air Force divestiture of its chimpanzee colony and the Coulston Foundation. The animal protection community cannot continue to shoulder the burden of this problem, a problem which was created by our government.

Mr. Chairman, the bill under consideration today is a viable solution. The bill would authorize a national system of sanctuaries to permanently retire chimpanzees no longer needed or suitable for research and at the same time be a cost effective solution to a serious problem facing the Federal Government. On behalf of AAVS, the task force and the 106 undersigned members of the scientific academic and zoological communities, I wish to state our strong support for the ChiMP Act. I would like to start by elaborating on some points that Dr. Goodall raised in her testimony.

Currently there are approximately 1500 chimpanzees housed in biomedical research facilities in the United States. Many of these animals are not involved in any research protocols, but are warehoused in these facilities. In captivity, chimpanzees can live up to 60 years. Thus, this country is faced with an increasing financial and logistical problem of caring for these aging chimpanzees. As we have already heard, in 1994, NIH commissioned the National Research Council to study this issue and develop recommendations for the long-term care of chimpanzees in research. The NRC's panel was composed of experts from the biomedical research community and from other areas of expertise.

The panel met for nearly 3 years and issued their report in 1997. After defining the nature of the problem, the NRC made several critical recommendations. One, sanctuaries are an appropriate solution. Two, there should be a breeding moratorium, and three, euthanasia is not an appropriate management solution.

On November 22, 1999, Congressman Jim Greenwood introduced the ChiMP Act. As of today, the Act has 73 bipartisan cosponsors, including many members of this committee and we expect campaign legislation in the Senate to be introduced shortly. Mr. Chairman, there are several provisions in the bill I would like to highlight. First, no chimpanzee will be retired unless the entity holding title to the chimpanzee decides to retire the animal. This leaves the decision up to the scientific community. At that point when the decision is made, retirement must be permanent. Second, the bill allows the scientific community access to data obtained in the course of normal veterinarian care as well as necropsy reports.

Contrary to NIH's concerns voiced today by Dr. Strandberg under the ChiMP Act, retired chimpanzees would, in fact, remain available for study and monitoring. Third, I wish to emphasize the cost-effectiveness of this solution. Sanctuaries offer considerable savings compared to the cost of housing chimpanzees in laboratories. Ethically, it is also the right thing to do. The ChiMP Act would establish a nonprofit entity with a board of directors having the nec-

essary expertise to ensure the high standards of care for chimpanzees in captivity.

Among others, the board would consist of scientists specializing in infectious disease. HHS has given the authority to develop enabling regulations. Finally, Mr. Chairman, this legislation includes a public private partnership for funding the sanctuaries, AVS and the task force member organizations have already donated considerable funds to sanctuaries housing chimpanzees. Our members have given generously and will continue to do so as long as they are assured retirement is permanent. Congressman Greenwood's ChiMP Act provides a win/win solution.

In closing, Mr. Chairman, we believe there are hundreds of chimpanzees that could be retired to sanctuaries if only they were available. The American public has shown their respect and concern for chimpanzees and would find it unconscionable that their taxpayers dollars are supporting NIH's current management plan of warehousing surplus chimpanzees. It is time to embrace a more responsible, a more humane alternative.

On behalf of AAVS, the task force, the American public, I urge you to enact this legislation this year. Thank you, Mr. Chairman, Congressman Greenwood, and members of the committee for this opportunity to convey to you the urgency of the situation, the merits of the ChiMP Act as a humane and cost-effective solution. We stand ready and able to work with you. And as Congressman Greenwood said earlier, it is a no-brainer.

[The prepared statement of Tina Nelson follows:]

PREPARED STATEMENT OF TINA NELSON, EXECUTIVE DIRECTOR, AMERICAN ANTI-VIVISECTION SOCIETY

Good morning, Mr. Chairman and Members of the Committee. Thank you for providing the American Anti-Vivisection Society the opportunity to testify on House Bill 3514, the Chimpanzee Health Improvement, Maintenance and Protection Act (CHIMP).

I am Tina Nelson, Executive Director of the American Anti-Vivisection Society, an international animal protection organization which was founded in Philadelphia, PA in 1883. We are the oldest animal protection organization specifically working on laboratory animal issues in the United States and our membership spans the globe.

I am also here today representing the National Chimpanzee Sanctuary Task Force that comprises four additional national animal protection organizations. Those are: the American Society for the Prevention of Cruelty to Animals (ASPCA), the National Anti-Vivisection Society (NAVS), Society for Animal Protective Legislation (SAPL), and the Humane Society of the United States (HSUS). Collectively these organizations represent a membership of 8 million constituents.

I would like to thank Congressman Greenwood for introducing this bill and for his commitment and support to solving a serious problem with positive action—building community consensus among a diverse group of people who do not often work together. I would also like to thank you, Mr. Chairman, as well as several other Members of the Committee, for supporting and cosponsoring this important legislation.

This important issue has provided a unique opportunity for the animal protection community to work with the research community in creating a solution that benefits scientists, government, chimpanzees and the U.S. taxpayer. Many in the animal protection community have received numerous requests over the past several years to assist different entities find a place for chimpanzees no longer wanted by the research community, for example, Laboratory for Experimental Medicine and Surgery in Primates (LEMSIP), Buckshire Corp., the recent Air Force divestiture of its chimpanzee colony, and the Coulston Foundation. The animal protection community cannot possibly shoulder the entire burden. Therefore, we have been working with others to develop a common sense solution.

Mr. Chairman, the bill under consideration today is that solution. The bill would authorize a national system of sanctuaries to permanently retire chimpanzees no

longer needed or suitable for research and at the same time be a cost-effective solution to a serious problem facing the federal government. On behalf of the members and constituents of the American Anti-Vivisection Society, The National Chimpanzee Sanctuary Task Force, and the 106 undersigned members of the scientific, academic and zoological communities, I wish to state our strong support for the Chimpanzee Health Improvement, Maintenance and Protection Act.

Let me start by providing the Committee with background on the surplus chimpanzee problem.

Because of the similarities between chimpanzees and humans, chimpanzees have been used since the 1950's as models for physiological, biomedical and behavioral research. After the importation of wild chimpanzees was halted in 1975, the National Institutes of Health (NIH) initiated a program, the Chimpanzee Breeding and Research Program, to breed captive chimpanzees for biomedical research, specifically for AIDS research. However, the chimpanzee proved to be a poor model for AIDS research. For this reason and others, we are now faced with a "surplus" of chimpanzees.

Currently, there are approximately 1,500 chimpanzees housed in six biomedical research facilities in the United States. Many of these animals are not involved in any research protocols but are warehoused in these facilities, some living in isolation in small cages. In captivity, many chimpanzees can live up to 60 years. Thus, this country is faced with the increasing financial and logistical problems of caring for these aging chimpanzees.

Over 6 years ago, this problem became significant enough to command the attention of NIH which in 1994 commissioned the National Research Council (NRC) to study the and develop recommendations for the long term care of chimpanzees in research. The NRC's panel was composed of diverse representatives from the biomedical research community and other interested parties. The panel met for nearly three years, held multiple public meetings, and produced their report in 1997. The NRC report, *Chimpanzees in Research: Strategies for Their Ethical Care, Management and Use*, found that if

... the current lack of long-range planning and coordination continues, the combination of excess captive chimpanzees in the US biomedical population and lack of facilities and resources to care for increasing numbers adequately will soon become an insurmountable problem of enormous complexity, cost, and ethical concern. (p.6)

After defining the nature of the problem, the NRC made several critical recommendations. The NRC report recommended the concept of sanctuaries and recommendation 4 states specifically, "the concept of sanctuaries capable of providing for the long-term care and well-being of chimpanzees that are no longer needed for research and breeding should become an integral component of the strategic plan to achieve the best and most cost-effective solutions to the current dilemma." The NRC Report also recommends the imposition of a breeding moratorium and opposes euthanasia of chimpanzees as a management solution.

On November 22, 1999, Congressman James Greenwood introduced the CHIMP bill that would establish a sanctuary system—facilities where hundreds of surplus chimpanzees will live in social groups and in natural settings and will be permanently retired from biomedical research. The bill mandates funding from both the private and public sectors.

The CHIMP bill has attracted strong bipartisan support in the House with 71 cosponsors, including many Members of this Committee. We expect companion legislation in the Senate to be introduced shortly and to also receive bipartisan support.

Mr. Chairman, there are several additional provisions in the bill I would like to highlight. First, no chimpanzee will be retired unless the entity holding title to the chimpanzee decides to retire the animal. Then and only then, will the chimpanzee go to a sanctuary. At that point, retirement must be permanent. Sanctuaries by definition must be a safe haven for the chimpanzees where they can be rehabilitated and resocialized where possible.

Second, the bill allows the scientific community access to data obtained in the course of normal veterinary care as well as necropsy reports. By providing this data, the chimpanzees remain of value to research while living humanely in cost-effective sanctuaries. This concept is consistent with the NRC report's recommendation of rejecting euthanasia as a management solution. Under the CHIMP bill, euthanasia would only be acceptable in cases in which it was in the best interest of the chimpanzee.

I wish to emphasize the cost effectiveness of this solution. By creating sanctuaries for chimpanzees to live in more social situations, sanctuaries obtain economies of scale and offer considerable savings compared to the cost of housing chimpanzees in laboratories. Ethically, it is the right thing to do.

The CHIMP bill specifies the establishment of a nonprofit entity with a board of directors composed of representatives of the research, animal protection, and zoological communities with the necessary expertise to ensure high standards for the care and management of chimpanzees in captivity. To protect the government's interests, HHS is given the authority to develop enabling regulations.

Finally, Mr. Chairman, this legislation includes a public/private partnership for funding the sanctuaries with the private sector raising matching funds for the care of the chimpanzees. AAVS and the Task Force member organizations have already donated considerable funds to sanctuaries housing chimpanzees retired from the federal space program. Our members have given generously and will continue to do so as long as they are assured that retirement is permanent. This approach provides a responsible, cost-effective, and humane alternative to current government policy of expensive laboratory warehousing of chimpanzees. It also holds the federal government accountable for a problem created under its program. Congressman Greenwood's CHIMP Act provides a win-win solution.

In closing, Mr. Chairman, we believe there are hundreds of chimpanzees that could be retired to sanctuaries today if they were available. It is imperative that action be swift with regard to this ever increasing problem. On behalf of the American Anti-Vivisection Society and the National Chimpanzee Sanctuary Task Force, I urge you to enact this legislation this year.

Thank you, Mr. Chairman, Congressman Greenwood and members of the Committee for this opportunity to convey to you the urgency of this situation and the merits of the CHIMP Act as a humane and cost-effective solution.

Mr. BILIRAKIS. We have all used that term, and found that others disagree sometimes. Well, the concern, of course, is for the chimpanzees and their well-being after they have been basically used, while ensuring that we do not interrupt ongoing research studies. In the process of discussing this with Dr. Goodall and with Dr. Strandberg, my feeling is that somehow these two concerns can be worked out rather than either one extreme or the other. It seems to me that we can find a middle ground. Would you agree, Ms. Nelson?

Ms. NELSON. Yes.

Mr. BILIRAKIS. Dr. Prince you would agree?

Mr. PRINCE. I think the differences are getting smaller and smaller.

Mr. BILIRAKIS. That is good to hear.

I have never seen a sanctuary. I think they call it the "chimpanzee farm" in my congressional district—it is actually pretty close to where I live. And we have always enjoyed it. The chimps there sometimes sit on the walls and wave to our cars as they zoom on by, and I know that the owners of the farm have taken the chimps to various schools and talking to the students and doing an awful lot of good things, but the chimps are kept in cages. We are contemplating, are we not, any sanctuary including cages, or are we?

Ms. NELSON. No.

Mr. BILIRAKIS. We are not contemplating that?

Ms. NELSON. Well, there are certain standards that are being drafted.

Mr. BILIRAKIS. But cages of different sizes; isn't that right?

Ms. NELSON. Well, large areas is my understanding, large areas where they can live in social groups.

Mr. BILIRAKIS. But they would be caged, but it might be an area as large as this room; is that right? I am trying to get a picture in my mind.

Ms. NELSON. I believe the picture is to have several acres of area and how the enclosure actually will be constructed, I am not sure.

Mr. BILIRAKIS. They would be enclosed is what I am saying.

Ms. NELSON. They would be enclosed in very large areas.

Mr. BILIRAKIS. In discussing this with Mr. Greenwood at some length, I brought up the point this particular chimp farm that I mentioned which has been, I guess, closed down. I know it was closed down a while back. I am not sure if the situation has changed there by the Department of Agriculture because it was considered to be unfit and I don't disagree with that. However, it seems that there are an awful lot of facilities like that around the country and should we, not in conflict with what Mr. Greenwood is trying to do, but considering Dr. Prince, you made a comment about the large number of chimps that need to go into sanctuaries, should we take into consideration the fact that these facilities are located around the country, and possibly use some of our resources to refurbish those to the point where they can meet standards and serve as sanctuaries in addition to the contemplation of one or two large sanctuaries that may be central locations in the country?

Ms. NELSON. I believe under the bill, they could submit a proposal.

Mr. BILIRAKIS. They can do that now, as I understand it, but I guess the process is a very difficult one.

Mr. PRINCE. I think it is a very complicated question because many of these facilities are for profit, private zoos, and many of them have really inadequate facilities that shouldn't be supported but some may be fine. I think it has to be an individual—

Mr. BILIRAKIS. There have to be standards, there has to be oversight, things of that nature. But that is a doable thing, isn't it, and it would help, would it not?

Ms. NELSON. Yes. May I ask you? Are chimpanzees still there?

Mr. BILIRAKIS. Yes. They are just closed to the public. In other words, the past use of them is basically closed to them, but they are still there, right?

Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman. To follow up on in the Houston area, we don't have what I consider the place for some type of facility. Doctor, you mentioned that at your laboratory in West Africa, you actually use large islands in a nearby river for that purpose. When you say "large islands," is that to say putting an enclosure? Obviously, the chimpanzees are then on that island and they can create their socialization.

Mr. PRINCE. They have to be resocialized before they go on the island, otherwise mayhem would ensue, but the islands are 10- to 30-acre environments. Chimps don't swim and therefore one doesn't have to build walls and they are covered with tropical rain forest and chimps are quite happy living in that environment.

Mr. GREEN. When you envision—and I haven't talked to Congressman Greenwood about it—but do you envision these facilities being in the United States or maybe using some fate like you have obviously in West Africa that we would create a sanctuary?

Mr. PRINCE. We are creating a sanctuary in West Africa, but it would be totally impractical to bring animals from outside of Africa into that, and it is not our intent. It is our intent to provide a good life for the animals that are in our setting.

Mr. GREEN. You would assume the legislation would create these sanctuaries within the United States?

Mr. PRINCE. Yes.

Mr. GREEN. And maybe the chairman's facility in Florida by coming up to standards could be a facility.

Mr. PRINCE. Africa, as you know, has some political instability which does not support such activities too well.

Mr. GREEN. We hear about it every day. I guess I was thinking about it and I have told my staff and the chairman, we had a situation in South Texas, and it wasn't with chimpanzees, but it was Japanese snow monkeys, that the facility south of San Antonio, which is not what I would consider user friendly except a native born animal there, but they lost their funding and then they really abandoned them and they have escaped and living, and I don't know how they survive in the scrub oak in Mesquite in south Texas, but some are and that would be my fear that, you know, obviously we need to have a facility that is funded and not just on an annual basis, but has some surety that they are going to be there both for the animal's protection but also, you know, so that there is not a problem within the region, although again, from what I understand, the snow monkeys are adapting very well to the dry climate of south Texas.

Ms. NELSON. I have actually been to that sanctuary. It is great.

Mr. GREEN. Is it really?

Ms. NELSON. Yes.

Mr. GREEN. My only experience with it, and I tell this story is my son and I have hunted in south Texas and he came back 1 day and he was I guess his first year in college, he tried to explain to us. He said dad, I think I saw a monkey in the tree. And typical hunting experience I said, don't tell these other guys because you will not live it down the next few days. Low and behold, a month later there was an article in the Houston paper that talked about the number of animals that escaped and are now in ranches around south Texas. I am glad to hear that because that bothered me that facility they escaped. I thought they lost their funding and just abandoned it.

Ms. NELSON. No, they moved to Dilley. And it is up and running. It is really a great sanctuary. They have a lot of acres.

Mr. GREEN. And they are adapting?

Ms. NELSON. Yes. They seem fine. I have been there twice.

Mr. GREEN. Glad to hear it. If you have any information, I would appreciate it. Of course we don't have monkeys in Texas, the ones that were native born.

Mr. Chairman, I appreciate it. I have one other question concerning the permanent retirement, and I know the concern from NIH, and I don't think there was a question about the permanent retirement, but the continued ability to monitor. Does that seem to be a problem? The chairman said it seems like we are close enough we could come to some agreement on it.

Ms. NELSON. The bill provides for that.

Mr. GREEN. But it needs to be once a chimpanzee is retired, they don't need to be able to be used again?

Ms. NELSON. Right.

Mr. GREEN. I don't think there was any opposition from NIH to that except—

Ms. NELSON. There is, I believe.

Mr. GREENWOOD. There is. They don't like it.

Ms. NELSON. Maybe we can convince them to like it.

Mr. GREEN. Thank you, Mr. Chairman. Thank you for introducing the bill.

Mr. GREENWOOD. Thank you. And if you are worried, we are not going to move them into your district and register them Republican.

Mr. GREEN. Mr. Chairman, I could make some comments on that.

Mr. GREENWOOD. They would have more sense to register Republican in your district.

Two questions. One for each of the witnesses. And then let's go to Dr. Prince first on this whole question. Biggest stumbling block is whether or not these chimps will be able to be called back for research purposes. From what I gathered from what the NIH has said formally today as well as other discussions I have been involved in, my sense is that No. 1, you take the number of chimpanzees that are ready for retirement now, and at the speed at which we can move things through Congress and raise the money privately and publicly and fund the creation of the first of these sanctuaries and move the first most likely population out, for the foreseeable future, it is my estimation that is going to leave a continued surplus available for research.

So in terms of numbers, my assumption is that we are a very long way from getting to the point where that would be an issue, and in any instance, it is the research community that decides when to relinquish them. Now, is there an issue, putting the numbers aside, do we have an issue here where we have a specific chimpanzee that might be selected for retirement and then something happens in terms of the technology of research? There is a breakthrough of one kind or another and a research says, you know, I think I can really learn something about XY disease if I bring that specific chimpanzee, or the 12 that I used for my earlier experiments, and brought them back and did some kind of invasive research. Is that, in your view, a very likely scenario? Obviously it is a hypothetical scenario.

Mr. PRINCE. It could happen, but it doesn't have to happen. Basically, there are not that many generic groupings here. There are HIV-infected chimps. There are HIV-recovered. There are HPV-infected and recovered, and HCV-recovered. It is my view that NIH and its advisors should decide on what is a reasonable resource for them to have that would take into account the possibility of unanticipated needs in the future and so on, and that would be a number. That number could be 600. It could be 1,000, I don't know. I don't think it has actually been very carefully assessed. I think it needs more careful study. And then within that number it should be sufficient for lookbacks at animals that were experimented on 5 years ago and so on and anything that is reasonable and those that are above that number should be out of the system and in retirement. That is my view.

Mr. GREENWOOD. I suppose that cuts both ways because to the extent that you make it a strictly one-way street, you do minimize the number of chimpanzees that might be kept back from the sanctuary for that very reason. I think about that sometimes that—

Mr. PRINCE. I really think that the NIH should have its own sanctuary system for breeding, for maintenance in case of emergencies. It is a different sanctuary system from the one that this bill addresses.

Mr. GREENWOOD. That's a perfect segue for my question for Ms. Nelson. If you noticed in the NIH's testimony today, they talked about their intentions to put out a request for proposal to actually build different, better, more housing for chimpanzees, and I tried to press the witness on what that would be like. I didn't completely succeed, except we learned that he didn't want to live there. Can you go into as someone who spends her whole life interested in the humane treatment of animals, what are the worst parts about our current system and what are your concerns that NIH would fail to do going out without the aid of this legislation, just going out and contracting with someone to build housing?

Ms. NELSON. One of my major concerns is that retirement would not be permanent if NIH was in control. I don't think that the facilities would be anything that we envision. They wouldn't be sanctuaries. The nature of this bill is that it is a safe place for these chimpanzees to retire and not have any invasive research done. And that is just not NIH's plan.

Mr. GREENWOOD. And I think that is an important point to make. I think some of the members were trying to have, in working on this issue, try to envision what a sanctuary looks like and my understanding is that in the ideal situation, you would have a very large natural enclosure filled with natural habitat. You probably would have walls that would be fairly high and unscalable, and then you would have some distance between trees and those walls so you couldn't have a chimpanzee leap, so therefore you would have a very natural setting. The only exception to that being there is a limit to the range and there would probably be some kind of shelter and then some kind of facilities in there to deal with the health needs, newborns if there are those, and those kinds of things. That is very different than a strictly artificial setting. I think that is what we are trying to create here, and I am not convinced that going to the lowest bidder is going to get you there. But the other thing that is important seems to me it is easy to forget that it is inhumane, and it is cruel to allow a chimpanzee to go out and form bonds and socialize and have the relief of a certain number of years or time in that kind of a setting, and then come for him and say, you know, it is time for him to go back into a cage in a laboratory that that is, in itself, cruel and unusual punishment.

Ms. NELSON. And I can comment on this personally because I had an experience with a chimpanzee when I worked for the Humane Society of the United States years ago, and there was a chimpanzee that was held in a cistern-type area underground at a bar and he was entertainment. He had a small caged area where he could come up. I eventually got down under there to see him and took the chimp away with a search warrant. It was a long, involved case, but one thing that sticks in my mind were his eyes. It was like staring into a blank nothing, I mean, just right through him. We had primatologists look at him, and one of the comments that Jane Goodall made that I will never forget is it is like locking a

16-year-old human being in a closet. Housing chimps alone in single cages, that was a different situation from a laboratory but that quote sticks in my mind, and that is exactly what he looked like.

Mr. GREENWOOD. One of the great things I learned from Dr. Goodall is that there is a tendency to ascribe the expressions on the face of chimpanzees and interpret them anthropomorphically, and to think that if they are bearing their teeth in what appears to be a grin, that that is a happy chimpanzee. She showed me a picture from Life Magazine, and I think it was Ham, the chimpanzee returned from space and the headline was happy astronaut returns to earth or something, and she said that is the most terrified chimpanzee I have ever seen in my life. So sometimes we see these television shows and circuses and what not what appears to be smiling chimpanzees, and what you are seeing is terror, which is certainly an emotion that they feel.

Mr. PRINCE. Could I just comment on the statement that you made of cruel and unusual punishment. I don't agree. We bring up our kids to the age of 18 they are thoroughly socialized. They have elaborate lives and then under certain circumstances, they are pulled into the Army and they go for a year or 2, and they come back and they are resocialized in a different way. It is our experience that we can take a chimpanzee born on an island in a re-socialized community, say 4 years old, take him back into the lab for a year or 2, and back out to the same community and they will reintegrate. I am not saying that one should bring the adults back. I think that is impossible. That would be wrong, but 5-year-olds I think it is possible.

And what I am visualizing is the NIH should have breeding, or potentially breeding sanctuaries with fertile females maybe not with fertile males if they don't want breeding, but then if they—we should have a sudden absolute need for chimpanzees, those communities could start breeding, the juveniles could be put into an experiment. Chimps remarkably almost never get sick with anything, so experiments are not that severe for chimps. So I have certain reservations about that.

Mr. GREENWOOD. Fair enough. One housekeeping duty. Without objection, the record will be held open for 7 days for members to submit additional questions and statements for the record. The letter with 106 signatures on it, is that part of the record or do we need a unanimous consent agreement to add that to the record? Let me, just to be doubly sure, I ask unanimous consent that the letter with the headline, "we, the undersigned members of the scientific and academic community endorse H.R. 3514, the Chimpanzee Health Improvement Maintenance and Protection Act, which would authorize the Federal Chimpanzee Sanctuary System for chimpanzees no longer needed in research," that that letter be made a part of the record.

[The information referred to follows:]

WE, the undersigned, members of the scientific and academic community, endorse H.R. 3514, the "Chimpanzee Health Improvement, Maintenance and Protection Act", which would authorize a federal chimpanzee sanctuary system for chimpanzees no longer needed in research: Jonathan S. Allan, D.V.M., *Scientist, Department of Virology and Immunology, Southwest Foundation for Biomedical Research (San Antonio, TX)*; American Zoo and Aquarium Association (*Silver Spring, MD*); James Anderson, Ph.D., *Senior Lecturer in Psychology, University of Stirling (Stirling,*

Scotlang); Kate Baker, Ph.D., *Research Associate, Yerkes Regional Primate Research Center, Emory University (Atlanta, GA)*; Marc Bekoff, Ph.D., *Professor of Environmental, Population and Organismic Biology, University of Colorado (Boulder, CO)*; Carol Berman, Ph.D., *Professor of Anthropology, University of Buffalo (Buffalo, NY)*; Tammie Bettinger, Ph.D., *Curator of Conservation and Science, Cleveland Metroparks Zoo (Cleveland, OH)*; Joseph T. Bielitzki, MS, DVM NASA, *Chief Veterinary Officer (Mountain View, CA)*; Mollie Bloomsmith, Ph.D., *Director of Research and Director of TECHlab Zoo Atlanta, Affiliate Scientist Yerkes Regional Primate Research Center, Emory University (Atlanta, GA)*; Carolyn Bocian, Ph.D.; Sarah Boysen, Ph.D., *Director of Primate Cognition Project and Associate Professor of Comparative Psychology, Ohio State University (Columbus, OH)*.

Hilary O. Box, Ph.D., *Senior Lecturer in Psychology, University of Reading, Vice President for Captive Care, Primate Society of Great Britain and the International Primatological Society (Reading, UK)*; Linda Brent, Ph.D., *President Chimp Haven, Inc. (San Antonio, TX)*; Betsy Brotman, *Director, Vilab II (Robertsfield, Liberia) and the New York Blood Center (New York, NY)*; Hannah Buchanan-Smith, Ph.D., *Lecturer in Psychology, University of Stirling, (Stirling, Scotland)*; Thomas Butler, D.V.M.; Richard W. Byrne, Ph.D., *Professor of Evolutionary Psychology, The University of St Andrews, Vice President for Membership, International Primatological Society (St Andrews, Scotland)*; Nancy Caine, Ph.D., *Professor of Psychology, California State University San Marcos (San Marcos, CA)*; John Capitanio, Ph.D., *Associate Professor of Psychology, University of California at Davis, and Staff Scientist at the California Regional Primate Research Center*; Gary Comstock, Ph.D., *Associate Professor of Philosophy and Religious Studies & Coordinator, Bioethics Program, Iowa State University (Ames, Iowa)*; Robert Cooper, D.V.M.; Colleen Crangle, Ph.D., *Computer Science (Palo Alto, CA)*; Steve Davis, D.V.M., *Professor of Animal Sciences, Oregon State University (Corvallis, OR)*; David DeGrazia, Ph.D., *Associate Professor of Philosophy, George Washington University and Senior Research Fellow, Kennedy Institute of Ethics, Georgetown University (Washington, DC)*; Frans de Waal, Ph.D., *Chandler Professor of Primate Behavior, Psychology Department, and Director of LIVING LINKS CENTER, Yerkes Regional Primate Research Center, Emory University (Atlanta, GA)*.

Wendy Dirks, Ph.D., *Assistant Professor of Anthropology, New York University (New York, NY)*; Merelyn T. Dolins, Ph.D., *Director of Physical Therapy, Department of Child Development and Rehabilitation, Valley Hospital (Paramus, NJ)*; Francine L. Dolins, Ph.D., *Program Scientist for Research, Behavioral Primatologist, Animal Research Issues, The Humane Society of the United States (Washington, DC)*; Alessandro Duranti, *Editor, Journal of Linguistic Anthropology, Department of Anthropology, University of California at Los Angeles (Los Angeles, CA)*; Stephen Easley, Ph.D., *Director, Easley and Associates, Professional Consultants (Alamogordo, NM)*; Sian Evans, Ph.D., *The DuMond Conservancy (Miami, FL)*; Brian Fay, Ph.D., *Professor of Philosophy, Wesleyan University (Middletown, CT)*; Jo Fritz, *Director, Primate Foundation of Arizona (Mesa, AZ)*; Member, *National Research Council Committee that produced 1997 Report, Chimpanzees in Research: Strategies for Their Ethical Care, Management, and Use*; Randy Fulk, Ph.D., *Curator of Research, North Carolina Zoological Park (Asheboro, NC)*; Paul A. Garber, Ph.D., *Professor of Anthropology, University of Illinois (Urbana, IL)*; Michele L. Goldsmith, M.S., Ph.D., *Assistant Professor of Environmental and Population Health, Center for Animals and Public Policy, Tufts University School of Veterinary Medicine (North Grafton, MA)*; Jane Goodall, Ph.D., *Jane Goodall Institute (Silver Spring, MD)*; Thomas Gordon, Ph.D., *Director, Yerkes Regional Primate Research Center, Emory University (Atlanta, GA)*.

Lisa Gould, Ph.D., *Assistant Professor of Anthropology, University of Victoria (Victoria, Canada)*; Victoria Hampshire, D.V.M., *Director, Advanced Veterinary Applications (Bethesda, MD)*; Beatrice H. Hahn, M.D., *Professor of Medicine and Microbiology, University of Alabama (Birmingham, AL)*; Lynette Hart, Ph.D.; Ned Hettinger, Ph.D., *Professor of Philosophy, College of Charleston (Charleston, SC)*; Robert A. Hinde, Ph.D., *Professor Emeritus, Cambridge University, Fellow of the Royal Society, Honorary Foreign Associate of the National Academy of Sciences (Cambridge, UK)*; William D. Hopkins, Ph.D., *Professor of Psychology, Berry College (Rome, GA)*; *Research Associate Yerkes Regional Primate Research Center, Emory University (Atlanta, GA)*; Sue Howell, Ph.D., *Research Director, Primate Foundation of Arizona (Mesa, AZ)*; Robert Hubrecht, Ph.D., *University Federation for Animal Welfare, United Kingdom*; Ellen Ingmanson, Ph.D., *Assistant Professor of Anthropology, Dickinson College (Carlisle, PA)*; Thomas Insel, M.D., *Director, The Center for Behavioral Neuroscience, Emory University (Atlanta, GA)*; Joseph Jacquot, Ph.D., *Professor of Biology, Grand Valley State University (Allendale, MI)*; Alicia Karas, D.V.M., Dipl. ACVA, *Assistant Professor of Anesthesiology, Tufts University School*

of *Veterinary Medicine, Foster Hospital for Small Animals (North Grafton, MA)*; Michael Kastello, D.V.M., Ph.D., *Executive Director, Research Resources, Merck & Co., Inc. (Rahway, NJ)*.

James King, Ph.D., *Professor of Psychology, University of Arizona (Tucson, AZ)*; Bette Korber, Ph.D., *Research Scientist, Santa Fe Institute (Santa Fe, NM)*; A. Lanny Kraus, D.V.M., Dipi. ACLAM, *Professor Emeritus, Division of Laboratory Animal Medicine, University of Rochester School of Medicine & Dentistry, (Rochester, NY)*; Susan P. Lambeth, *Environmental Enrichment Director, M.D. Anderson Cancer Center (Bastrop, TX)*; Louise Lamphere, Ph.D., *Professor of Anthropology, University New Mexico (NM)*; Virginia Landau, Ph.D., *Staff Primatologist, The Jane Goodall Institute (Silver Spring, MD)*; Director ChimpanZoo (Tucson, AZ); Clark Larsen, Ph.D., *Amos Hawley Professor of Anthropology, University of North Carolina (Chapel Hill, NC)*; Alecia Lilly, Ph.D., *Research Fellow, Department of Anthropology, State University of New York (Stony Brook, NY)*; Orla Mahoney, D.V.M., *Tufts University, School of Veterinary Medicine (North Grafton, MA)*; Terry Maple, Ph.D., *President and CEO, Zoo Atlanta (Atlanta, GA)*; Linda Marchant, Ph.D., *Professor of Anthropology, Miami University (Oxford, OH)*; Preston A. Marx, Ph.D., *Senior Scientist and Professor of Tropical Medicine, Tulane University Medical Center (Covington, LA) and Aaron Diamond AIDS Research Center (New York, NY)*; William C. McGrew, Ph.D., *Professor of Zoology, Miami University (Oxford, OH)*; Patrick Mehlman, Ph.D., *Director of Mondika Primate Research Center, Department of Anthropology, State University of New York (Stony Brook, NY)*.

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Viktor Reinhardt, Ph.D., *Laboratory Animal Specialist, Animal Welfare Institute (Washington, DC)*; Vernon Reynolds, Ph.D., *Professor of Biological Anthropology, Institute of Biological Anthropology, Oxford University (Oxford, UK)*; Anthony Rose, Ph.D., *Director, The Biosynergy Institute (Hermosa Beach, CA)*; William E. Roudebush, Ph.D., *Associate Professor of Obstetrics & Gynecology and Molecular Cell Biology & Pathobiology, Treasurer, International Primatological Society, Medical University of South Carolina (Charleston, SC)*; Andrew N. Rowan, D. Phil., *Senior Vice President of Research, Education & International Affairs, The Humane Society of the United States (Washington, DC)*; Thomas Jefferson Rowell, D.V.M., *Director, University of Southwestern Louisiana, Lafayette-NIRC (New Iberia, LA)*; Duane Rumbaugh, Ph.D., *Director, Language Research Center, Georgia State University (Atlanta, GA)*; Lilly-Marlene Russow, Ph.D., *Professor of Philosophy, Purdue University (West Lafayette, IN)*; *Member, National Research Council Committee that produced 1997 Report, Chimpanzees in Research: Strategies for Their Ethical Care, Management, and Use*; Anthony Rylands, Ph.D., *Conservation International and IUCN/SSC, Primate Specialist Group*; Dale Schwindaman, D.V.M.; Jack F. Sharp, *President, Biomedical Research Foundation of Northwest Louisiana (Shreveport, LA)*; James Serpell, Ph.D., *Associate Professor of Humane Ethics & Animal Welfare, and Director, Center for the Interaction of Animals & Society, Department of Clinical Studies, School of Veterinary Medicine, University of Pennsylvania (Philadelphia, PA)*.

Yukimaru Sugiyama, Ph.D., *Professor Emeritus of Kyoto University and Dean of Faculty of Humanities of Tokai-gakuen University, President of Primate Society of Japan*; Ema Toback, Ph.D., *Assistant Professor of Psychology, Santa Monica College (Santa Monica, CA) and University of Stirling (Stirling, Scotland)*; Joel Trupin, Ph.D. *Professor of Biochemistry, Meharry Medical School (Nashville, TN)*; Caroline Tutin, Ph.D., *Senior Research Fellow, Centre International de Recherches Medicales,*

(Franceville, Gabon); and Department of Biological and Molecular Sciences, University of Stirling (Stirling, Scotland); Augusto Vitale, Ph.D., Research Fellow in Animal Behaviour, Section of Comparative Psychology, Laboratorio de Fisiopatologia di Organo e di Sistema, Istituto Superiore di Sanita' (Rome, Italy); Janette Wallis, Ph.D., Associate Professor of Research, Department of Psychiatry & Behavioral Sciences, University of Oklahoma Health Sciences Center (OK); Lyna Watson, Ph.D. Affiliated Scientist, Zoo New England (Boston, MA); Francoise Wemelsfelder, Ph.D., Research Fellow in Animal Welfare, Animal Biology Division, Scottish Agricultural College (Edinburgh, Scotland); Brent C. White, Ph.D., Matton Professor of Psychology, Centre College, Danville, Kentucky; Roger D. White, M.D., Anesthesiology (Rochester, MN); Thomas Wolfle, D.V.M., Retired Director, Institute of Laboratory Animal Research, National Research Council, Program Director, National Research Council Committee that produced 1997 Report, *Chimpanzees in Research: Strategies for Their Ethical Care, Management, and Use*.

Richard Wrangham, Ph.D., Professor of Anthropology, Department of Anthropology, Harvard University (Cambridge, MA); Stephen L. Zawistowski, Ph.D., Certified Applied Animal Behaviorist, Senior Vice President and Science Advisor, The American Society for the Prevention of Cruelty to Animals; Co-Editor, *Journal of Applied Animal Welfare Science* (New York, NY).

Mr. GREEN. One last question, Mr. Chairman.

Mr. GREENWOOD. The Chair recognizes the gentleman from Texas.

Mr. GREEN. One last question. Because of the experience we have had with the Coulston Foundation, the NIH is not in the business of creating sanctuaries and I can't think of an example where they would do it, but if they went out for an RFP, would groups like yours, the Humane Society, be willing to create that and work with them? Because again, I don't know if I feel comfortable with NIH doing it themselves, but they would contract with someone, so we don't have a repeat of what has happened with Coulston where we find out that there is obviously, it is not a sanctuary, it is not something that we would feel comfortable with.

Ms. NELSON. I think that would be difficult to work with NIH on that level.

Mr. PRINCE. I think that NIH did embark in a breeding program in Texas, which was part of the reason we have too many chimps now, but that was a very well-run breeding program. It was not quite what we would call a sanctuary. There are various spacious group housing. I don't see any reason why NIH shouldn't, if it is concerned with having available chimp resources, why they shouldn't have their own semisanctuary, not quite sanctuary, but along the same lines, and they can certainly give contracts to appropriate people to run that in an appropriate way, I would think. They are not bad people.

Mr. GREEN. I know they are not bad people. I just was wondering if they had that experience in dealing with actually retirement of a chimpanzee, instead of bringing them back, actually retirement and running an expansive sanctuary. I don't know if they have that experience.

Mr. PRINCE. None of us have all that much experience. Sanctuary is a new thing and we are all learning and we are all going to learn together by communicating. NIH people can learn with us.

Mr. GREENWOOD. If I may, I assume, Ms. Nelson, you are not suggesting that the animal welfare organizations would not want to participate on the advice—as advisory boards?

Ms. NELSON. No, I am not suggesting that.

Mr. GREEN. They wouldn't want to actually be the ones that would contract and provide for the sanctuaries? Again, I would feel more comfortable with someone who has the interest you have than someone who may be in a nonprofit like Coulston, but particularly for profit, may have some concerns about it, because once the legislation goes from here, we lose control over it, except for our hearing process and an annual appropriations.

Ms. NELSON. I have been given a note that says funds.

Mr. GREENWOOD. It is something we never do up on this side.

Mr. GREEN. To continue, I understand the funding base. That is the problem, but if this bill did pass and we created that funding base where NIH would have that ability to go out to the private sector or sector that obviously has an interest to manage a competent sanctuary.

Ms. NELSON. Maybe I am misunderstanding. So the funds would come from the animal protection?

Mr. GREEN. No, would come from NIH. Again, there may be some—just like we do with lots of things, you know, there are things you can do with funding from the private sector but there would be basic funds through NIH for appropriations for it.

Mr. GREENWOOD. Okay. I thank both of the witnesses for your attendance. I thank the members who have attended today. This hearing is adjourned.

Ms. NELSON. Thank you.

[Whereupon, at 2:26 p.m., the subcommittee was adjourned.]