Ms. Foxx. Thank you.

Dr. Mathews, I want to ask you one question. And we are nearly out of time, so we will try to make the questions short and the answers short, too. Has anyone ever created stem cells from cloned human embryos?

Ms. Mathews. Not that I’m aware of.

Ms. Foxx. OK. Has it been done even in monkeys?

Ms. Mathews. Monkeys have been very difficult to clone, it is true.

Ms. Foxx. OK. Is there anyone on the panel who disagrees with that answer?

Dr. Chole. Monkey embryos have been cloned by Gerry Schatten in Pittsburgh. I don’t—I am not sure if their stem cells have been extracted and cultured, but the embryos have been made. He is doing that for reproductive purposes for one way to protect endangered species.

Ms. Foxx. Is he the person who was collaborating with Dr. Hwang in Korea?

Dr. Chole. That is correct.

Ms. Mathews. Is it the case that his embryos were basically in vitro embryos, or were they SCNT embryos?

Dr. Chole. They are SCNT embryos. He has had some success with that. But they have not developed. They have implanted but not developed.

Ms. Foxx. Dr. Chole, is there any biological difference between the entity that is created through so-called therapeutic cloning and reproductive cloning?

Dr. Chole. No.

Ms. Foxx. Thank you. OK.

Ms. Norsigian, what have other countries done in the area on SCNT and egg donation, and what role did a concern for women’s rights have in the passage of these laws? Do you think the conservative movement, as we are typically used to thinking about in the United States, was very active in getting these laws passed? And what reaction would you have to that?

Ms. Norsigian. Well, I have to say I think it is unfortunate that the abortion debate and debates about the moral status of the embryo have clouded the discussion of cloning for research purposes that I focused on in my remarks. In Canada, interestingly enough, advocates, researchers, people with differing religious views, sat down and they actually came up with something that was acceptable to everyone, including the scientists.

And they are putting a moratorium on SCNT. They are not saying never. They are saying, right now we have so much to learn with other embryo stem cell research. Some of the problems were just raised: the inability to control differentiation so you get the kind of tissue type you want, the inability to control tumorigenicity.

I believe that only John Gearhardt and Johns Hopkins has avoided that by growing the mice embryos to the fetal stage so that germ line cells were harvested. These are not embryo stem cells. And in that instance, he was then able to eliminate the issue of tumorigenicity.
There are many problems that I think may be able to be overcome. And those problems can be possibly solved, and you can use embryo stem cells that would be created from otherwise discarded embryos from IVF clinics. Though there are reasons, and I mention them, that make SCNT advantageous, I don’t think they yet justify the known and unknown risks that we are asking women to undergo.

There have been similar concerns expressed in England. And it is interesting. They are allowing this to go forward. The HFEA there has fairly strict regulations. But there is quite a controversy about this, particularly as we see some of the harms that women experience.

Ms. Foxx. We don’t have something—I am.

Ms. Watson.

Ms. Watson. Are you doing an overhead presentation? Is someone doing an overhead?

Ms. Foxx. No. I don’t think it is going to work.

Ms. Watson. OK. I just want to thank the panelists, and of course the Chair. I think this has been very enlightening because it opens up a whole new, I would say, panoply of thought. And I think these are some of the issues that have been brought up today that we are going to have to deal with.

I would definitely hate to see conclusions because of some of the fraud that has been perpetrated stop the serious research that can save lives, limbs, and improve physical conditions. I would hope that we could think through and work through the ethical issues, moral issues, and reach for a higher goal, and that is research that can improve the quality of life.

So I would look forward—not a question, just a statement—to further discussions of this type and to the panelists getting back to us with messages from your research as to the direction the Federal Government should take.

With that, I want to thank you, Madam Chair, and I will have to leave. And thank you very much.

Ms. Foxx. Well, Mr. Doerflinger, I want to share some information and then ask you a question.

In the district that I represent, there is some absolutely fabulous and earth-shaking research going on, Baptist Medical Center, with the use of adult stem cells. The key researcher there said in front of me and another Member of Congress who was visiting there recently that—in response to a question about why he was not using—or why he did not advocate the use of embryonic stem cells, said that—voiced many of the issues that have been voiced here today, aside from—even aside from religious and ethical issues, that these lines of stem cells simply created more problems than they resulted in benefits from.

He and his researchers are able to grow organs that are helping make massive changes in peoples’ lives. And they are helping our military people by regeneration of limbs.

Is it your experience, again, that many of the scientists are not using the embryonic stem cells not for religious purposes but because of scientific reasons, so that they do not have to “cloud the issue” by bringing that issue—by bringing the issue of religion into it?
Mr. D OERFLINGER. Well, the ethical issue, which I agree with what was said here earlier about the ethical issue being far broader than any religious issue, is certainly a factor. But I also know of many researchers who do all of their work on non-embryonic stem cells simply because they are easier to work with, easier to control.

In many cases, they do not require lengthy FDA approval because they are the patients' own cells. They are not rejected as foreign tissue. They are in plentiful supply and can be—the research is showing they can be multiplied for clinical use more effectively than used to be the case. And they are working.

Last night, ABC had a premier of its—I guess a new series called "Miracle Workers" featuring a man whose blindness was cured by his sister's adult corneal stem cells. And researchers at the University of South Florida, I think, up at St. Elizabeth's Medical Center in Massachusetts, have all said, it is not that we object to the ethics of the embryonic cells, it is that these are working and we think they are going to work better.

And I think it is important to put this in a context that even in the Clinton administration, the National Bioethics Advisory Commission said that they did realize there is an ethical problem here. They were willing to override the ethical problem because they thought that was the only way to go.

But they said that the pursuit of embryonic stem cell research, even using embryos, spare embryos, from fertility clinics, would not be justifiable if there were less morally problematic alternatives available for pursuing the research.

And I think researchers have shown over and over again that those alternatives are real. They are very promising. And in many cases, they may well make it unnecessary for us to face these terrible ethical dilemmas.

Ms. FOXX. Thank you very much. I believe that—Mr. Brown.

Mr. BROWN. I would just like to make a comment as a patient and as a patient advocate. I heard earlier that there are 60 adult cell cures that have been put in place, some of which I am aware of. One of them that was mentioned was Parkinson's.

First, I question if the acid test has actually been made of replication. I know on some of it, it has—leukemia, for instance. The first time I heard about the Parkinson's was 2003. I know of no Parkinson's patient who is waiting for embryonic stem cells. If adult stem cells in truth were doing the job, I would be one of the happiest people in the world because I would see my wife of 44 years being able to walk 24 hours a day again.

So I think that there is—and I believe that there is a tendency to overstate a great deal of what this science has and has not accomplished from both sides of the issue. I believe there is a great deal of misstatement, a great deal of miseducation—which I think it is very important that we educate. And what I would like to see is a more civil building of consensus and compromise to allow all of this research to go forward; that we close no doors, and see where science can take us.
Ms. Foxx. Thank you all very much for being with us today. The hearing is adjourned.
[Whereupon, at 5 p.m., the subcommittee was adjourned.]
[Additional information submitted for the hearing record follows:]