

that. There was not a single soul who said that we ought not to anything, and that that problem ought to be addressed, and that it is the responsibility, obviously, of Congress to get it done. There were a couple of tongue in cheek suggestions about what we ought to do with folks over 65, but those were purely for humorous effect at the meeting.

There was the common theme that we needed to fix it, and all of their suggestions had merit, but some of them I would like to point out. They talked extensively about personal retirement accounts, talking about putting more money in personal retirement accounts when they are younger because they would have a greater opportunity to increase; some of them thought we ought to increase the age of retirement but, when they get closer to that, I suspect they will not believe that. They spoke about not increasing the 12.4 percent tax. There was an interesting conclusion or recommendation that education on retirement plans ought to be mandatory in high school. Education on retirement plans ought to be mandatory in order to graduate from high school, they said. I thought that was an interesting item; probably something that we ought to take up. Then one final point that they made, and that was that people ought not rely on just Social Security for their main source of income in their retirement years.

Now, Mr. Speaker, we tend to get distracted here. We talk about different ages, we talk about those over 55, and I think it is important for everybody to appreciate that those over 55 will not be affected at all. Those youngest individuals in our society will be those most affected.

I challenge our colleagues to follow the lead of the high school students in my district who said, get down to business, put politics aside, and do not wait. That is good advice from those individuals who are most affected by whatever changes we bring about.

#### STEM CELL RESEARCH: EMBRYONIC VERSUS ADULT

The SPEAKER pro tempore (Mr. FORTENBERRY). Under the Speaker's announced policy of January 4, 2005, the gentlewoman from North Carolina (Ms. FOXX) is recognized for 60 minutes as the designee of the majority leader.

Ms. FOXX. Mr. Speaker, I rise this evening because I fear that a number of good people will make a bad decision in the coming weeks. What is worse is I fear they will be making this decision based on a plethora of false information, and that is why I am here this evening.

There is an abundance of misinformation, exaggeration, and blatant lies being spread by interest groups regarding the prospects for embryonic stem cell research. The first misconception is that embryonic stem cell research is not legal. The fact is, embryonic stem cell research is completely legal. Re-

search on embryonic stem cells has taken place for years.

But what has this research produced? Nothing. While adult stem cells have treated over 58 diseases in human patients, embryonic stem cells have not treated even one patient. Adult stem cells have had success in treating debilitating and fatal illnesses without compromising ethical standards. Embryonic stem cells have treated nothing while, at the same time, destroying human life.

So why in the world would anyone support the unethical, failed use of embryonic stem cells instead of the ethical, successful use of adult stem cells? Because they do not know the difference. That is why, Mr. Speaker, I want to share some very important information tonight. If and when the American public learns the scientific facts, and I want to stress "scientific facts" regarding stem cell research, the ethical questions will not matter as much.

Now, I had the good fortune today to hear a talk by Dr. Robert P. George, who is the McCormick Professor of Jurisprudence in the Department of Politics at Princeton University in Princeton, New Jersey. Not all of the information that I am sharing with you tonight came from Dr. George, but he gave an outstanding talk sponsored by the Wilberforce Forum as a part of the Majority Leader's lecture series, 2005. The title of his talk was "Embryonic Stem Cells: Ethical Boundaries, and Possible Ways Forward."

I want to use some material that I have also received related to the definition of stem cells, and some of the research that has been produced in this area by Dr. Tadeusz Pachotczyk who has done post doctoral work at Massachusetts General Hospital at Harvard Medical School after he earned his PhD in neuroscience from Yale University. What is a stem cell? I used to teach, and I always believed that you start with the basics when you are teaching. So let us start with the definition. What is a stem cell?

A stem cell is essentially a blank cell capable of becoming another, more differentiated cell-type in the body, such as a skin cell, a muscle cell or a nerve cell. Why are stem cells important? Stem cells can be used to replace or heal damaged tissues in cells in the body. There are two broad classes of stem cells. The two basic types of stem cells are embryonic type and adult type. Embryonic stem cells and embryonic germ cells make up the embryonic type. Umbilical cord stem cells, placental stem cells, and adult stem cells make up the adult type.

Now, where do embryonic-type stem cells come from? They come from embryos. Embryonic stem cells are obtained by harvesting living embryos which are generally five to seven days old. The removal of embryonic stem cells invariably results in the destruction of the embryo. Another type of stem cell called an embryonic germ

cell can be obtained from either miscarriages or aborted fetuses.

Now, where do adult type stem cells come from? They come from umbilical chords, placentas, and amniotic fluid. Adult-type stem cells can be derived from various pregnancy-related tissues, or they come from adult tissues. In adults, stem cells are present within various tissues and organ systems. These include the bone marrow, liver, epidermis, retina, skeletal muscle, intestine, brain, dental pulp, and elsewhere. Even fat obtained from liposuction has been shown to contain significant numbers of adult-type stem cells, and I am going to refrain from making any jokes about that tonight. Cadavers. Neural stem cells have been removed from specific areas in post-mortem, human brains as late as 20 hours following death.

Now, there are people who believe that embryonic stem cells have a great deal more to offer than adult stem cells. Let me say a little bit about what embryonic stem cells bring that adult stem cells do not. They do seem to be very flexible and to have the potential to make any cell. And, there is a lot of availability, so we are told, with embryonic stem cells from in vitro fertilization clinics, although there is some debate about exactly how many there are.

What are some of the disadvantages of embryonic stem cells? They are very difficult to differentiate uniformly and homogeneously into a target tissue. It is extremely difficult to get them to do exactly what we want them to do. Immunogenic. Embryonic stem cells from a random embryo donor are likely to be rejected after transplantation. They just do not work as well. They are capable of forming tumors or promoting tumor formation. This is one of the major drawbacks of embryonic stem cells.

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And, of course, the most important disadvantage of embryonic stem cells is that they result in the destruction of human life.

Now, let us talk a little bit about the advantages of adult stem cells. Special adult-type stem cells from bone marrow and from umbilical cords have been isolated recently which appear to be as flexible as the embryonic type. They are already somewhat specialized, so inducing them to go into a certain area may be much simpler.

They are not immunogenic; recipients who receive the products of their own stem cells will not experience immune reaction. This is extremely important. Relative ease of procurement. Some adult stem cells are easy to harvest: the skin, muscle, marrow, fat, while others may be more difficult to obtain, brain stem cells.

Umbilical and placental stem cells are likely to be readily available. More and more people are being encouraged now, when they have babies, to save the umbilical and placental cells and store them for possible later use.

Adult stem cells tend not to form tumors. And there is absolutely no harm done to the donor when we harvest adult stem cells. Now, what are the disadvantages? Let us be fair. There are some. There is a limited quantity of them. They can sometimes be difficult to obtain in large numbers.

They may not live as long as embryonic stem cells in a culture. And they may be a little bit less flexible, with the exception again of bone marrow and umbilical cord ones.

Now, why are adult stem cells preferable to embryonic stem cells? Adult stem cells are a natural solution. They naturally exist in our bodies, and they provide a natural repair mechanism for many tissues of our bodies. They belong in a microenvironment of an adult body, while embryonic stem cells belong in the microenvironment of the early embryo, not in an adult body where they tend to cause tumors and immune system reactions.

Most importantly, adult stem cells have already been successfully used in human therapies for many years. And let me just say, some of the therapies that adult stem cells have been used for, they have treated brain cancer. Embryonic stem cells have not.

Adult stem cells have treated breast cancer, they have treated ovarian cancer, adult stem cells have treated testicular cancer. Embryonic stem cells have not.

Adult stem cells have treated leukemia, Crone's disease, anemia, stroke, Parkinson's disease. Embryonic stem cells have not been able to treat any of these diseases, not any of them.

It is really important that people understand the difference in the two types of cells. I support the President's position on what to do with embryonic stem cells. I think the President has come up with a very carefully thought-out position on this issue. And this is where we need to stay.

The people who are pushing the use of embryonic stem cells say they want something to salvage from the cryo stage because they will be destroyed or kept in limbo. That does not have to happen. Once we begin to use embryonic stem cells for treatment, we are crossing the Rubicon in terms of ethical issues. We cross an ethical barrier when we do that because we are destroying one life for another.

Those embryos are human beings and should not be treated as research subjects. We would never kill to harvest body parts because of the principle of human dignity.

We do not even do this with our most heinous criminals. We do not treat them as things. We treat them with dignity until the time that they die.

We have a terrible situation with people promoting the destruction of embryos for stem cell research. And I thought it would be interesting tonight to remind us of what the Declaration of Independence says. This is the Declaration of Independence that unfortunately too few young people read or understand in our society anymore.

And I will just read the beginning of it: "When in the course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the Earth the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation."

And this is the part of the Declaration that if anybody knows the Declaration of Independence at all, this is the part that they know: "We hold these truths to be self-evident, that all men are created equal. That they are endowed by their creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness."

That to secure these rights governments are instituted among men, deriving their just powers from the consent of the government.

It is extremely important that we not lose sight of what founded this country, and the basic principle of life which is enunciated in the Declaration of Independence. We have to come down to understanding what is a human being. Scientists will say that an embryo is a human being. It is internally self-directed. And I want to say some more about that.

Because what happens with an embryo is nobody has to do anything to it from the outside. It is a human being at the embryonic stage. And it internally self-directs itself to grow and to develop into a person that then is born after the cells divide and divide and divide.

We are not talking about a religious issue only. For some people this is a fundamental religious issue, and it should be. But it is also a scientific issue. All human beings have profound human dignity. And, again, never, never in our society have we stooped so low as to sacrifice some human beings for others.

There is not a single therapeutic trial going on in the United States right now using embryonic cells, no clinical trial. There are lots and lots and lots of trials going on using adult cells.

There is private money going into this research, but the President has said we will not use government money; we will not tax the people of this country, many of whom are so opposed to this issue to do something which they find so abhorrent. Now, there is money going into research. Private money. Where is that money going?

It is going into the research for adult cells. That should tell us a lot. People think that that is where the payoff is going to be. People do not invest their money in things that they do not think is going to pay off.

And it is very, very important that we not be persuaded to use government

money, our money, taxpayers' money to go into something that not only holds very, very little promise for any kind of results, but is so abhorrent again to so many of our people.

Now, I want to share with you some success stories about adult stem cell research. Laura Dominguez had a spinal cord injury. As a result of a car accident in 2001, she broke her neck and was paralyzed from the chest down. She was treated with a mix of adult stem cells and other cells obtained from olfactory tissues inside her own nose.

The cells were transplanted across the injury site and her damaged spinal cord; and several months after the surgery, she was able to move her foot. She now walks with braces. Her remarkable progress is continuing, and several other spinal cord injury patients like her are also showing benefits from the transplant surgery.

Patrizia Durante was diagnosed with acute leukemia 6 months into her pregnancy. Her daughter, Victoria Angel, was born healthy; but Durante was given only 6 months to live. The stem cells from the blood of her daughter's umbilical cord were used for a transplant. Several years later, Durante is in full remission.

Durante told reporters she saved her mommy. She is a little miracle. That is why we named her Victoria Angel. She is my little angel.

There are many, many examples of people who have been treated and treated extremely well with adult stem cells. Again, I want to say that we are stepping into dangerously uncharted territory when we begin the practice, or if we begin the practice of destroying one life to try to help another life.

It is an ethical Rubicon that we should not be crossing. And, again, I know that many people are doing this because they are concerned. They have members of their family who are diabetic, they have members of their family who have Parkinson's disease, or they know people who have diseases and they want to do something to help them.

I urge them to study this issue very, very carefully and make sure that they understand the differences between what is happening with adult stem cell research and embryonic stem cell research. And I feel certain that those people will make the right decision, and they will not vote to use money to destroy human embryos and go in that direction when we do not have to, because we have the means to save lives and improve the quality of life with adult stem cells.

#### LEAVE OF ABSENCE

By unanimous consent, leave of absence was granted to:

Ms. HARMAN (at the request of Ms. PELOSI) for today after 7:30 p.m. and the balance of the week on account of official travel.

Mr. LUCAS (at the request of Mr. DELAY) for today after 4:00 p.m. and