

SENATE HEALTH, EDUCATION, LABOR AND PENSIONS COMMITTEE**TESTIMONY BY CHRISTOPHER REEVE****MARCH 5, 2002**

Senator Kennedy, Members of the Committee: Thank you for the opportunity to testify this afternoon. For the record, I am a C-2 ventilator-dependent quadriplegic, which means that I am paralyzed from the shoulders down and unable to breathe on my own. For the last 7 years, I have not been able to eat, wash, go to the bathroom, or get dressed by myself. Some people are able to accept living with a severe disability. I am not one of them. That is why I have a keen interest in research and am deeply disturbed by unreasonable attempts to block scientific progress. The fact that the House of Representatives banned cloning last year without careful deliberation makes the Senate debate a matter of great urgency.

Because Senator Brownback has introduced a Senate version of the House bill I wish to comment on some of his public statements. He has characterized embryonic stem cell research as “immoral and unnecessary.” But in testimony before the Harkin/Specter Subcommittee on January 24th he stated that he supports *in vitro* fertilization clinics. When Senator Harkin asked if he was aware that the majority of excess fertilized embryos are routinely thrown into the garbage his response was “ I think most of them are put up for adoption”. That is simply not true. In a recent interview Senator Brownback said that he wants to cure A.L.S. and added “if we pursue the adult stem cell area where we all agree that we can do this,.... that it’s the right thing to do.” Again, that is not true. Experts in A.L.S. research believe that embryonic stem cells are the best and possibly the only hope for victims of that fatal condition.

Today 100 million Americans suffer from serious or currently incurable diseases. 54 million Americans are disabled. Our government is supposed to do the greatest good for the greatest number of people; beyond that we have a moral responsibility to help others. Time is absolutely critical. If the government forces scientists to attempt to make adult stem cells behave like embryonic stem cells, they might waste 5 years or more and fail. In the meantime, hundreds of thousands will have died.

Why do we need therapeutic cloning? As a layman several important reasons come to mind. One: implantation of human ES cells is not safe unless they contain the patient's own DNA. Two: Efforts to repair central nervous system disorders may need to recapitulate the process of fetal development. That can only be accomplished by human ES cells. Three: Therapeutic cloning is done without fertilizing an egg. It can be strictly regulated. If we also enforce an absolute ban on reproductive cloning, we will not slide down the dreaded "slippery slope" into moral and ethical chaos.

Any powerful new technology comes with the potential for abuse. But when we decide that the benefit to society is worth the risk, we take every possible precaution and go forward. The unfertilized eggs that will be used for nucleus transplantation (aka therapeutic cloning) will never leave the laboratory and will never be implanted in a womb. But if we don't make this research legal, if we don't use government funding and oversight, it will happen privately, dangerously unregulated and uncontrolled.

Our country is about to lose its preeminence in science and medicine. We took a giant step backwards in the 1970's when the NIH was not allowed to fund *in vitro* research until an advisory commission could be formed to consider the issue. In the meantime there was rapid progress in England and the first "test tube baby" was born in 1978. For purely political reasons we did not succeed until 1981. Now IV clinics are commonplace; so far 177,000 children have been conceived in 400 facilities around the country.

Today human trials to defeat Parkinson's are underway in Sweden. In Israel macrophages, scavenger cells that eat debris in the body, are being used to repair the damaged spinal cord within two weeks of injury. The first human subject was a 19 year-old girl from Colorado. Last week the House of Lords in the U.K. passed legislation permitting research on cloned human embryos for the second time.

Those are not rogue nations behaving irresponsibly. They are allies, no less moral than we are. If we act now, we still have a chance to catch up. I urge the Senate to defeat Senator Brownback's bill S.1899 and pass S.1758.

Thank you very much