

**Opening Statement of  
Rep. Henry A. Waxman  
Before the Subcommittee on Criminal Justice, Drug Policy, and Human Resources  
Hearing on Human Cloning and Embryonic Stem Cell Research after Seoul: Examining  
exploitation, Fraud and Ethical Problems in the Research**

**March 7, 2006**

We are going to hear testimony today about the ethical issues around embryonic stem cell research and therapeutic cloning. In particular, we will focus on the scandal in South Korea regarding fraudulent research and abuses of research subjects. Many opponents of stem cell research would like use to use the South Korea experience as a basis for banning embryonic stem cell research.

The story of Dr. Hwang's fraudulent research in South Korea is shocking because we rely on scientists to discover the truth, not subvert it. We need to condemn the fraud, figure out what happened, and learn how we can keep it from happening again. And we need to make sure that this research is well regulated and thoroughly scrutinized.

But banning future stem cell research would be a gross overreaction. Unfortunately, though the vast majority of researchers are honest, fraud sometimes occurs in scientific and medical research. In 1983, a cardiology researcher at Harvard was found to have fabricated much of his data. In 1996, it was revealed that reports of a re-implanted ectopic pregnancy by British physicians were fraudulent. And in 2002, it was discovered that a rising-star physicist working on carbon-based semiconductors had fabricated most of his data.

The answer to these instances of fraudulent research was not to ban or deny funding for research on heart disease, ectopic pregnancy, and semiconductors. The right answer is to create and uphold high standards of oversight. When doubts emerge, disclosure, investigation, and corrections must happen swiftly and openly. That's the right response whether the fraud involves heart disease or stem cell research.

We are also going to hear questions raised today about the potential benefits to be gained from various types of stem cell research. Those who oppose embryonic stem cell research often

claim that because we do not yet know what therapies it will yield, we should not allow it to proceed.

This is a flawed line of reasoning. If followed to its logical conclusion, it would mean that the federal government should only fund research into cures and therapies that we already know about.

The argument also understates what we do know about embryonic stem cells. Decades of research have established the potential that these cells hold for addressing serious illnesses such as Alzheimers, Parkinsons, and cancer. I say “potential” – not “promise” – because there are no promises in any form of research. But what scientists have already learned about stem cells indicates great potential - the argument for moving ahead is not merely theoretical.

Opponents of embryonic stem cell research claim that there is still much to learn from adult stem cells and therefore we should focus our efforts there. It is true that adult stem cells may hold potential, and I fully support researching the possibilities of adult stem cells. But evidence tells us that the potential of adult stem cells may be limited because they are already more specialized than other types of stem cells. We should indeed move forward with research on adult stem lines, but this is no argument against pursuing study of other types of stem cells with even more potential.

The third issue we will discuss today is the safety of women who donate oocytes, or eggs, for stem cell research. Egg donation relates to a specific type of research called Somatic Cell Nucleic Transfer (SCNT). This technique involves removing the nucleus of an unfertilized egg and replacing it with the nucleus of an adult cell.

SCNT has two benefits compared to stem cell research on embryos from a fertility clinic. First, a possible outcome of this research is the production of tissues that are a genetic match to the patient, reducing the risk of rejection such as that we often see with organ recipients. Second, the technique holds great potential for studying genetic and other diseases, because scientists could potentially develop cells using nuclei from people who have the disease. This

would not generally be possible using embryos donated from fertility clinics, because researchers cannot select the genes for such cells.

Witnesses today will discuss their concerns about the safety of the women who donate eggs for this research. Some of these concerns are legitimate. The drugs and techniques used are identical to those used by women undergoing fertility treatments, but they are not without risk. I believe that we need to carefully research and monitor safety.

I also agree that we need to think carefully about how egg donors for research should be compensated. We must respect the contribution that these women make and we must ensure that they participate voluntarily. As with any new field of research, the safety and ethics of human participants are paramount.

What we must not do, however, is become paralyzed into inaction. Stem cell research – including research using embryonic cells – may help cure diseases that cause untold suffering to millions of Americans and hundreds of millions more around the world. With strict scientific and ethical oversight, embryonic stem cell research – including SCNT - should be supported with federal funds.