

Thank you, Mr. Chairman, for holding this very timely hearing. We welcome all of our witnesses who will be testifying today.

Every family in America has experienced the tragedy of watching a loved one suffer through a deadly or debilitating illness. Diseases like Parkinson's and Alzheimer's take a terrible toll on families' lives and livelihoods. While we have made great strides in biomedical research in recent years, we still don't have all the keys to unlock the secrets of disease.

That is why the potential of embryonic stem cells is so exciting. Embryonic stem cells have the ability to develop into virtually any cell type in the human body. Scientists tell us that harnessing the power of these cells could one day lead to new treatments, and maybe even cures, for a number of diseases that afflict American families.

Important research is being done every day on stem cells. I'm proud that some of this research is being done at the University of Wisconsin in Madison, which was the first to isolate human embryonic stem cells. We're pleased to have Dr. Su-Chun Zhang from the University's Waisman Center here today to testify on the groundbreaking work that he and his colleagues are doing.

We all understand, of course, that this research is not without controversy. I respect the concerns that some people have about the use of embryonic stem cells in research, and I agree that we must closely monitor this research to ensure that it is done ethically.

However, scientists and disease advocates are warning us that the current limits on Federal funding for stem cell research are seriously inhibiting our potential to find new cures. Without expanded Federal support, we risk slowing down the tremendous progress that could be made to alleviate human suffering.

It would be unconscionable for the Federal government to turn its back on the discoveries that expanding stem cell research promises. Now more than ever, it's important to grasp this

opportunity in an ethical manner by making sure that potentially lifesaving research keeps moving forward.

We look forward to hearing from our expert panel today and hearing their recommendations. Again, we thank you, Mr. Chairman, for holding this important hearing.

Questions for Panel 2:

Lawrence S. Goldstein, Univ. of CA-San Diego, (via remote video)

1. In your testimony, you speak to the great medical need and urgency for expanding embryonic stem cell research to find treatment and cures. In your opinion, what will happen to your research and that of others in our public institutions, if embryonic stem cell research is forced to be conducted largely in the private sector or in other countries?
2. States like California and my own state of Wisconsin are moving forward with their own initiatives to encourage and provide funding for stem cell research in the absence of a strong federal policy. With no coordinated Federal oversight or strategy, are we at risk for creating duplicative research efforts in different states?

Dr. Su-Chun Zhang, University of Wisconsin

1. Opponents of embryonic stem cell research point to the potential of adult stem cells as an alternative. In your expert opinion, do adult stem cells hold the same potential as embryonic stem cells? Can the breakthroughs you have achieved with embryonic stem cells be done with adult stem cells?
2. With the limited number of embryonic stem cell lines currently available for Federal funding under President Bush's 2001 policy, how do you think that will impact research done at the University of Wisconsin and other public institutions, and how will it affect privately funded research?
3. While many of us support the expansion of federally funded research, we also believe there must be ethical standards and guidelines that go with it. Do you think that both privately funded and federally funded research could use more oversight to ensure that embryonic stem cell research is ethically controlled? What recommendations do you have for federal standards if federally funded research is expanded?