Testimony of

The Honorable Orrin Hatch

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Today the Committee takes up an important set of issues as we explore how considerations of law and ethics affect - and should affect - the science of what is commonly and perhaps sometimes confusingly lumped together under the term cloning.

In a general sense, cloning merely means making a xerox copy - an exact duplicate. There are, in fact, many types of entirely unobjectionable, noncontroversial common uses of cloning in science. For example, if researchers developed a new smallpox vaccine and needed to clone billions and billions of copies of a snippet of genetic material as part of this new therapy, no one would complain.

In the context of this hearing, cloning does raise substantial questions. Today, we will examine cloning as a technique to produce cells, or even potentially whole individuals, with the identical genetic code of one parent cell.

Cloning stands in sharp contrast to normal reproduction - the proverbial birds and the bees - in which the father and mother each contribute one-half of the genetic makeup - the DNA - of the offspring. While nature in some cases produces twins who share the same two parents and virtually identical genetic code, cloning technology could conceivably one day enable the birth of a literally a new type of person who springs forth from solely the genetic contribution of a single parent.

The type of cloning we are discussing today revolves around the technology of somatic cell nuclear transfer. This consists of removing the nucleus of an egg and replacing it with the full complement of 46 chromosomes from an adult body cell. This, of course, is very different from the time-immemorial case in which the egg and spermatozoa contribute 23 chromosomes each to the offspring. Theoretically, an embryo produced in the test tube through this somatic cell nuclear transfer technique could be implanted into a womb and result in a live birth.

No doubt somewhere, some - such as the Ralians - are trying make a name for themselves and are busy trying to apply the techniques that gave us Dolly the Sheep to human beings. Frankly, I am not sure that human being would even be the correct term for such an individual heretofore unknown in nature.

I am a conservative and an unabashed pro-life, religious conservative at that. Or should I say, to be politically correct, I am a faith-based conservative. In any event, I would be extremely hesitant to rewrite the Book of Genesis as the story of Adam or Eve.

We know that most everyone at this time opposes so-called reproductive cloning - the development and birth of a completely new type individual through what would essentially amount to an elaborate form of asexual reproduction.

The fact is that, today, there is not a simple, straightforward federal law that prohibits reproductive cloning. I believe - and I believe that the members of this Committee and the entire Senate and the House believe - that it is long past time for reproductive cloning to be prohibited by federal law.

Here's the rub: There is another branch of cloning, termed by its proponents as therapeutic cloning, whose motivation is not birth, but the development of broad range of new treatments and diagnostic tests for a host of diseases. Through cloning techniques, it is possible that the type of highly versatile pluripotent stem cells we heard so much about last year could be produced.

As some of the testimony today reveals, many scientists and advocates believe that this line of research is both ethically proper and appears extremely promising. Many believe that the problem of potential rejection of new stem cell-derived tissues could be minimized, and perhaps avoided altogether, by this DNA regenerative therapy.

Other well-respected experts and groups will tell us that not only is the science being over-hyped, but there remain fundamental legal and ethical objections to this line of research because the very creation - and subsequent destruction of -- these new types of cloned embryos is inherently immoral.

A question with which the Senate struggled in 1998 and with which we still struggle with today is to see whether we can find a way to outlaw the offensive uses of cloning techniques, but do so in a manner that does not bar potentially life-saving and ethically proper scientific research.
I commend Senator Leahy and Senator Feinstein for holding this hearing today so we may more fully explore these complex issues. The Senator from California, together with our colleague, Senator Kennedy, has offered legislation on this topic. As well, Senator Specter, in partnership with Labor-HHS Appropriations Subcommittee Chairman Tom Harkin, has held over 12 hearings in this general area, and they have also offered both legislation and leadership in the biomedical research arena.

Frankly, I think we all need to take our hats off to President Bush and Congressional leaders like Arlen Specter and Tom Harkin for the bipartisan achievement in doubling our nation's investment in biomedical research at NIH over the past 5 years.

My pro-life colleague and good friend, Senator Brownback, takes a different view than Senators Feinstein and Kennedy and Specter and Harkin on some key aspects of cloning legislation. He, too, has offered a bill. It is similar to the measure sponsored by one of our most influential witnesses today, Rep. Dave Weldon, that passed the House last year. We welcome Representative Jim Greenwood here today and commend him for his efforts as well.

I am studying the issues and the proposed legislative responses. I have met with experts on all sides of this issue and welcome the opportunity to learn more today.

This debate today will inevitably and ultimately involve questions regarding when and under what circumstances life begins. As we saw during the debate on the federal funding of certain stem cell research last year, these are difficult issues and opinion is unlikely to be monolithic.

Public education and debate are essential in our pluralistic society if we are to reach acceptable compromises on contentious issues. Toward this end, I would repeat a thought I raised at a Judiciary Committee mark-up last August when I wondered aloud whether the development of an egg incapable of implantation might alter the debate of these issues? I intend to ask this question of the witnesses today.

I hope that today's hearing will help the members of the Committee gain a better understanding of the science, law and ethics of cloning. It is my hope that this Committee and the Congress will be able to arrive at a reasonable consensus on a policy that fully respects the dignity of humanity with respect to reproduction and research.

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