

**Statement of Thomas H. Murray, Ph.D.
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**Testimony before the
Subcommittee on Oversight and Investigations
United States House of Representatives**

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I want to begin by thanking Representative Greenwood for the invitation to speak to you today. My name is Dr. Thomas Murray, and I am a member of the National Bioethics Advisory Commission (NBAC). NBAC was established by President Clinton in 1995 to advise and make recommendations to the President through the National Science and Technology Council and to others on bioethics issues and their policy implications. My fellow commissioners on NBAC come from a variety of disciplines and backgrounds, and include research scientists, religious scholars, physicians, lawyers, and members of the public. My day job is as President of The Hastings Center in Garrison, New York, an independent non-partisan research institute that addresses fundamental ethical issues in the areas of health and medicine, the biomedical sciences, and the environment. I serve on the Committee on Ethics of the American College of Obstetricians and Gynecologists, and am the author of *The Worth of a Child*.

Upon the announcement of the cloning of Dolly the sheep in February of 1997, former President Clinton asked NBAC to review the legal and ethical issues associated with cloning technology and report back to him in ninety days. Today I will briefly describe NBAC's report and its recommendations. This report represents NBAC's assessment of these issues as we saw them in 1997. The Commission has since issued three other reports, with two more to be completed soon, on issues related to research with human subjects.

There is a saying in my field that "good ethics begins with good facts." To that end, NBAC held three meetings, with testimony from scientists, theologians, ethicists, legal scholars, and the general public, and commissioned eight papers on different issues relating to cloning. NBAC focused on a very specific aspect of cloning, namely where genetic material would be transferred from the nucleus of a somatic cell of an existing human being to an enucleated human egg with the intention of creating a child. We did not revisit questions of human cloning by embryo-splitting or issues surrounding embryo research.

The Commission discovered that the potential ability to clone human beings through somatic cell nuclear transfer techniques raises a host of complex scientific, religious, legal, and ethical issues—some new, and some old. Especially noteworthy was the diversity of views that we heard among religious scholars, indeed even among those within the same religious tradition. Although we did not agree on all of the ethical issues surrounding the cloning of human beings, we nonetheless unanimously concluded that given the state of science, *any attempt to create a child using somatic cell nuclear transfer, whether in the public or private sector, is uncertain in its outcome, is unacceptably dangerous to the fetus, and therefore, morally unacceptable.*

In addition, NBAC made the following recommendations:

- The moratorium on the use of federal funding in support of any attempt to create a child by somatic cell nuclear transfer should be continued. Non-federally funded entities should be asked to comply voluntarily with the intent of the federal moratorium. Professional and scientific societies should make it clear that such an act would be irresponsible, unethical, and unprofessional at this time.
- Federal legislation should be enacted to prohibit any attempt to create a child by somatic cell nuclear transfer. Such legislation should include a sunset clause to ensure that Congress reviews

the issue after a specified time period, such as three to five years. Any state legislation should have a similar sunset clause. At some point prior to the expiration of the sunset period, an appropriate oversight body should evaluate and report on the current status of the technology and the ethical and social issues that cloning would raise.

- Any legislative or regulatory actions should be carefully written so as not to interfere with other important areas of research, such as cloning of human DNA and cell lines.
- If a legislative ban is not enacted or is lifted, clinical use of somatic cell nuclear transfer to create a child should be preceded by research subject to independent review and informed consent.
- The United States should cooperate with other nations and international organizations to enforce common aspects of their policies.
- The federal government and others should encourage continuing deliberation on these issues, in part to enable society to develop appropriate policies regarding cloning should the time come when present safety concerns have been addressed.

We hoped that the report would form a useful initial basis for ongoing deliberations and educational dialogues that we believe are essential. We also recommended that the federal government actively encourage public education in this area of science so that public deliberation is as informed as possible.

NBAC has not continued to debate human cloning issues, but we have been well aware of the continuing scientific developments and the ethical and policy discussions that have ensued in this country and abroad.

For example,

- In 1997, the G8 nations agreed at the Denver Summit on the “need for appropriate domestic measures and close international cooperation to prohibit the use of somatic cell nuclear transfer to create a child.”
- With regard to our recommendation on federal legislation, it is worth noting that at least 14 countries, including the United Kingdom, Australia, and Israel, have existing legislation prohibiting cloning. Earlier this month, a Council of Europe protocol prohibiting cloning human beings went into effect.
- In this country, several states have proceeded to pass their own legislation regulating cloning. The NBAC staff surveyed state laws in 1999, at which time five states had enacted legislation to directly prohibit human cloning, and ten states had laws regulating research on embryos and fetuses that could also restrict cloning activities. Some of these laws are broader in scope than others, and I would recommend that Congress follow NBAC’s recommendation to craft a law that does not interfere with other areas of research.

In my personal view, the scientific literature since 1997 describing the cloning of non-human animals has only further illustrated the risks posed to the children that might be born as a result of this technique as well as to the women who would carry these pregnancies to term. Researchers are only beginning to understand the causes of the abnormalities in cloned animals that have been born in recent years. Imagine a new drug that caused abnormalities or neonatal deaths in half of the babies born to women treated with it, and risks to the women as well. Imagine further that this drug was given to women who were otherwise healthy. Would there be any debate over the ethical acceptability of using this drug? Or would we condemn it resoundingly as unethical experimentation on human beings? I believe that we would express moral outrage. Yet these are the very risks encountered when we try to create a human child by cloning today.

I also believe that we need urgently a vigorous public conversation about the broader ethical issues raised by cloning: its impact on children and the parent-child relationship, the perhaps illusory control people may believe it offers over the traits of their offspring. I have wondered if the best antidote to the enthusiasm behind human cloning would be if someone were successful at cloning Michael Jordan—and Michael II, although he would begin to lose his hair at roughly the same age as his progenitor, had absolutely no interest in playing basketball but wanted desperately to become an accountant. What made Michael the First great was his fierce determination and unexcelled competitiveness, not merely his physical gifts.

NBAC's recommendations are as relevant to the current discussion on human cloning as they were when first offered four years ago. I would ask you to take them into consideration.

Thank you for the opportunity to speak to you, and I am happy to answer any questions that you may have.