

Crafting a Consensus On Therapeutic Cloning
By ROBERT POLLACK
pollack@columbia.edu

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American scientists seem to have forfeited their chance to convince our government to support research into therapeutic cloning as the source of a new generation of rational therapies. It was not always this way. As a young scientist working at Cold Spring Harbor in the early 1970s, my phone call to Paul Berg at Stanford concerning his new work on recombinant DNA and tumor viruses led to the Asilomar conferences, from which the voluntary moratorium on recombinant DNA work emerged, leading to the formation of the NIH's Recombinant DNA Advisory Committee, a model of bioethics at work to this day.

At first sight, it seems too late for revisiting the recombinant-DNA precedent, as President Bush already has issued a ban on federal support for any manipulation of a human egg cell except for fertilization by donor sperm, and then only so that the resulting pre-embryo may be placed in a woman's uterus so that it may become a baby.

The president's position is understandable when seen through the lens of his publicly acknowledged, deeply held religious convictions. It is odd that no one — not the president, nor the press, nor the many corporate and university ethicists, scientists and doctors who have spoken out in the past few years — has seemed comfortable admitting the matter of personal religious belief to the discussion of these two decisions. To reopen the issue, it must be restated in a way that allows honest reconsideration of this larger context.

One reason given by the president for turning away from this technology was the anxiety that if placed in a woman's body for the requisite nine months, a reoriented human genome in a donor egg cytoplasm might be born as either a clonal copy of the donor of that nucleus, or a genetically engineered one. Here the president seemed to be on strong ground: A cloned human would be a terrible experiment, performed on a person for his or her entire life, with no chance of that person withdrawing from the experiment if it does not go well.

But the anxiety that therapeutic cloning might be misused to create a cloned child is no reason to turn away from the new technology itself. Between the therapeutic clonal cell line and the cloned person stands a formidable barrier, one that makes therapeutic cloning both feasible and safe. That barrier, all but invisible in the discourse on cloning but no less solid for that, is a woman's body.

Consider what would follow if legislation now being discussed were passed into law, and carrying a human clone to term were made illegal. It is clear the president supports such a law, and I do, too. Were such legislation to become law, then women would be held responsible and accountable to ensure that a therapeutic clone would not become a person. Under those circumstances, each therapeutic clone would have only one function: the amelioration of suffering of the donor of its initial nucleus. But how could such a law become enforced except under the aegis and with the full endorsement of the law that holds a woman responsible for the decisions she makes concerning the initiation and termination of her pregnancies?

Human eggs — the sole source of that brilliant cytoplasm that can send a human genome down the paths of differentiation into all the different cells of the body — are the product of women's bodies. Human embryos and fetuses and newborns are also the products of women's bodies. No potential person can become a person outside of a woman's body. In our country at this time, a Supreme Court precedent exists for the notion that a woman, but not her fetus, is a person under the law and therefore subject to both the freedoms and the responsibilities of the law. This law establishes the right of a woman to the use and control of her own body, up to and including her right to end the life of a fetus within her as long as that fetus would be unable to survive outside.

If the government would only accept what such a law would confirm — the legal responsibility of women in this country for that part of their lives that men cannot replicate but only control — it would be able to work with scientists to issue a strong call for therapeutic cloning from donor eggs, coupled with an equally strong sanction against the implantation of any experimentally modified human embryos into a woman's body. But because such a ruling would be binding only on women, it would require the government to accept that a woman is fully

responsible for her body at all times and that a pregnant woman, but not the fetus within her, is a person in law.

Today, unwilling or unable to do this, the NIH instead has issued only a strong condemnation of future therapeutic cloning, as if the availability of a woman's body, once the egg had been given its nucleus, could be taken entirely for granted. It is insulting if not illegal to give women so little credit and so little power that it becomes necessary indirectly to protect them from this potential misuse of their bodies by forbidding therapeutic cloning, a technology that begins with a woman's egg but not her uterus and that might conceivably end with a new, safe, secular technology of healing.

Robert Pollack is professor of Biological Sciences and director of the Center for the Study of Science and Religion at Columbia University. This article is adapted from a longer essay in the newspaper "Forward."