

## The Ethics of Control

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In the beginning, there was the stem cell. While newspapers have primarily focused on this solitary cell, caught in a swirling debate about medical potential and research funding, others have come to recognize the larger struggle at hand—a struggle over the control of reproduction and human biological materials. Indeed, only days after the Bush Administration announced its support for limited federal funding for research on embryonic stem cells, legislators in Wisconsin, the epicenter of embryonic stem cell research, announced their intention to introduce legislation that looks more broadly at the infertility services that have led to the glut of “surplus” embryos destined for destruction and eyed with interest by stem cell researchers.<sup>1</sup> And less than three months later, some U.S. senators found themselves trading their desire to increase federal embryonic stem cell funding for a withdrawal of a bill to criminalize reproductive and research cloning.<sup>2</sup> This deal, however, was threatened when a Massachusetts company announced partial success at generating human embryos through cloning,<sup>3</sup> triggering renewed calls for Senate action to ban research cloning.<sup>4</sup> But if this debate is less about the ethics of research on stem cells and more about the ethics of the reproductive control that, among other things, yields the embryos from which the stem cells are obtained, then how can one understand the forces that shape public attitudes?

Toward the end of Simon Mawer’s novel, *Mendel’s Dwarf*, the protagonist, a hereditary dwarf, faces a choice: “Benedict Lambert is sitting in his laboratory playing God. He has eight embryos in eight little tubes. Four of the embryos are proto-Benedicts, proto-dwarfs; the other four are, for want of a better word, normal. How should he choose?”<sup>5</sup> How indeed? How should he decide which of the embryos to use to make his child?

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† An earlier, unannotated version of this piece appeared as R. Alta Charo, *Are We Playing God? Or Playing Human?*, WASH. POST, Aug. 12, 2001, at B1.

Whether in the debates over human reproduction or over embryonic stem cell research, again and again the public debates whether it is wrong to “play God.”<sup>6</sup> But what does this mean? If a couple decides to destroy one of its embryos, would that be playing God? Or if a cell taken from the inside of the mouth is cloned to make an embryo for research use, is that crossing the line?

President Bush seems to draw that line somewhere in between. On August 9, 2001, he endorsed federal funding for research on stem cells derived from embryos that are now long dead, but said he would not endorse government-financed research on cells derived from embryos yet to be killed or those made specially for research purposes.<sup>7</sup> Citing his own prayer and reflection, as well as America’s diversity of faith, he said, “Human life is a sacred gift from our creator,” and “[w]e recoil at the idea of...creating life for our convenience.”<sup>8</sup> These conclusions led him to a compromise, he said, one that limits the government’s entanglement with acts that involve creating embryos but permits it to benefit from destroying them, at least if that act of destruction happened some time ago and is beyond our—and God’s—ability to alter.<sup>9</sup>

In a country pledged from its formation not to endorse a single faith, a country in which the decennial census shows ever-increasing diversity of faiths—and lack of faith—in the population, how can people reach a consensus about government policies on stem cell research while differing on views as fundamental as whether it is righteous duty, heretical defiance, or mere scientific inevitability to exercise control over things as fundamental as life and death?<sup>10</sup>

The President would seem to view control over creation and destruction of an embryo as an unacceptable act of human hubris, a view shared by many Christian theologians. During a 1997 consideration of cloning policy, for example, the National Bioethics Advisory Commission (NBAC) heard similar testimony. Its members listened as theologian Dr. Gilbert Meilaender testified that Protestants, although stout defenders of human freedom, nonetheless “have not located the dignity of human beings in a self-modifying freedom that knows no limit, [not] even...God.”<sup>11</sup> Rev. Albert Moraczewski, a Catholic, testified that cloning “exceed[s] the...delegated dominion given to the human race. There is no evidence that humans were given the power [by God] to alter their nature or the manner in which they come into existence.”<sup>12</sup>

So what should Benedict do? Should he refuse to choose, because choosing is an act of God, an act that exceeds his delegated dominion over life? Benedict’s instinct about God’s role is in fact somewhat different:

Of course we all know that God has opted for the easy way out. He has

decided on chance....You may...select two of the four normal embryos and send them over to the clinic for implantation...or...select the four achondroplastics, the four stunted little beings...and send them over instead...or...refuse to usurp the powers of God and choose instead to become as helpless as He...by choosing one normal embryo and one achondroplastic and leaving the result to blind and careless chance.<sup>13</sup>

When fertile couples have intercourse, sometimes an egg is fertilized. At times, the uterine lining catches that fertilized egg, and it develops into a baby. At other times the fertilized egg slides past that lining and is washed away in menstrual blood, unnoticed and unmourned at the end of the month. Should infertile couples whose embryos rest in laboratory dishes rather than the womb be similarly careless, rolling dice to decide whether to use or destroy them? Or are they—as is our government—obliged to take control and ensure that each and every embryo is placed in the body at just the right time to maximize the chance of gestation and beat the natural odds? If the latter, then, should this action, this defiance of the natural order of chance and luck, also suggest the option to choose not to use the embryo, but instead to donate it for potentially life-saving research?

It is evident that Americans do not share a common view on the act of choice where creating life is concerned, and that is why the stem cell issue is so difficult. While some see choosing as “playing God,”<sup>14</sup> others see it as “playing human.”<sup>15</sup> Indeed, Rabbi Elliot Dorff testified at that same NBAC meeting that we are “the partner of God in the ongoing act of creation. We are God’s agent....The [Jewish] tradition has not been passive in terms of simply accepting whatever medical cards we have been dealt.”<sup>16</sup> Examining Biblical texts, Rabbi Moshe Tendler testified that being such a partner means taking an active role, and that “artificiality,” far from being wrong or evil, is rather a sign of humanity’s constructive contribution, a sign that we are doing our duty.<sup>17</sup> Furthermore, a professor of Islamic studies, Aziz Sachedina, described how the Koran suggests that “as participants in the act of creating with God, God being the best of creators, human beings can actively engage in furthering the overall state of humanity by intervening in the works of nature, including the early stages of embryonic development” when the goal is to achieve a natural good, such as health or fertility.<sup>18</sup>

For those who view acts of reproductive control as heretical, it is difficult to tolerate the waste that accompanies modern infertility care, its laboratories filled with frozen surplus embryos that are no longer wanted by anyone. But it becomes almost insurmountably galling to them to be asked to pay for research using stem cells derived from some of these

embryos, even if the embryos would have been destroyed anyway, and even if their tax dollars will not be used in any way to help or hasten that destruction. For many opponents of stem cell research, publicly funded research makes every taxpayer unwillingly complicit in the underlying, immoral choice to destroy the embryo.<sup>19</sup> It matters not that most would not hesitate to accept organ donation from the victim of a carjacking and murder; while they might mourn the necessity of finding their own lives saved through the death of another, in no way would they feel that their acceptance of this gift of life made them complicit in the underlying brutality of the victim's death.

Where embryonic stem cells are concerned, however, the sense of complicity persists. Perhaps it is because the embryos, while already doomed, are viable until their stem cells are removed, raising images of state-sanctioned execution by disembowelment. Or perhaps it is simply because opponents fear becoming complicit, not in the act of embryonic destruction itself, but in a culture of tolerance for embryonic destruction, a culture that might become increasingly comfortable with balancing the needs of the born against the needs of the embryo, a culture that balances not only the needs of patients against embryonic loss, but also the needs of scared teenagers or impoverished women with unwelcome pregnancies.

There are, of course, broader implications of the President's decision. He cited not only the diversity of faiths in the United States and the diversity of opinions within those faiths, but also the diversity of experience in this country with the illnesses that might best be cured by research with embryonic stem cells. "I have friends whose children suffer from juvenile diabetes," Bush said. "Nancy Reagan has written me about President Reagan's struggle with Alzheimer's. My own family has confronted the tragedy of childhood leukemia."<sup>20</sup> This visceral, intimate knowledge of the interests held in the balance led him to approve limited funding because of the responsibility, in his words, to juxtapose "the need to protect life in all its phases with the prospect of saving and improving life in all its stages." Should this not lead him to consider, then, whether other people's visceral, intimate knowledge of the ravages of birth defects, unwanted pregnancy, or infertility makes an equally compelling case for tolerating embryonic loss and enhanced reproductive control? Indeed, does his decision not commit him to a position long considered pro-choice: that the needs of those already born must be balanced against our regard for embryonic and fetal life, and that the people entitled to decide what happens to an embryo are not those in government but those whose gametes were used to create it?<sup>21</sup>

Philosopher Thomas Nagel wrote that "Morality's ambition is, or at

least ought to be, to provide a system of conduct under which everyone can live with a sense of mutual justifiability. This follows from the conditions of political legitimacy."<sup>22</sup> A democracy consists of more than voting once a year. It consists of ensuring that all those voters and their elected representatives identify with both the peril and potential of each policy choice. This is why there is hope to be found in the extended public deliberation on embryo and stem cell research. Even its opponents will partake in the cures that may be found for juvenile diabetes, Alzheimer's disease, Parkinson's disease, heart disease, and spinal cord injuries. Few, one suspects, would pledge to forever forego such treatments because of their origins.<sup>23</sup> The medical treatments they may receive will likely not be sufficient to overcome their personal objections, but it does ensure that they will not be politically insulted solely on behalf of the interests of others; their interests, too, are promoted by this research.

This concern about the distribution of burdens and benefits of policy choices represents something larger than the more narrowly focused debates about the morality of stem cell research, abortion, euthanasia, or any number of divisive practices. It is an indication that Americans are united more by a shared desire for fair governance than divided by respective disappointments in the particular stem cell research policy adopted through that governance. And it is a sign that the policy choices created by advances in the biomedical sciences may be resolved by supplementing attention to traditional bioethics with some attention to political ethics and a philosophy of governance that insists upon leaving no one social group with the burdens but not the benefits of a policy choice, and no one political movement with the desire but not the political access to alter it.<sup>24</sup>

In many ways, the compromise crafted by the Bush administration concerning stem cell funding features these characteristics of political legitimacy. By limiting funding to existing cell lines derived from long-dead embryos,<sup>25</sup> the arguments about complicity are moved away from images of the executioner and toward the images of organ donation.<sup>26</sup> Funding also enables research on alternative, less controversial forms of stem cells, so that parallel experimentation ensures that if other sources ever become an adequate substitute,<sup>27</sup> research on embryonic sources can be forgone and gratuitous offense avoided.<sup>28</sup> At the same time, its insistence on using only a limited number of cell lines<sup>29</sup> (a limit that many scientists fear will delay research that might otherwise save the lives of people already sick today<sup>30</sup>) may not be supportable in the long run,<sup>31</sup> premised as it is on a particularly personal vision of the role of humanity and of God.

The furor over embryonic stem cell research, in general, and research on cloning in particular, puts one in mind of earlier conflicts between the needs of science and the sanctity of the body—dead, alive, or yet to be conceived. Although physicians in ancient Greece were permitted to dissect the bodies of foreigners, dissection of Greeks was unthinkable.<sup>32</sup> Indeed, for most of the medieval era in Europe, dissections were forbidden because of the Church's view that the human body was God's province. It was not until the thirteenth century that strictly limited and controlled dissection was permitted at universities, and even then the practice continued to represent an uneasy truce between cultural taboos and scientific advances.<sup>33</sup>

Each generation debates the limits of what can be done to the human body and reaches its own conclusions.<sup>34</sup> And in every era, some scientist feels compelled to test those limits in the name of knowledge. In the current era, that debate will continue under the auspices of yet another federal body set up to consider the perils and potentials of biomedical advances—the President's Council on Bioethics, which Bush announced on August 9th.<sup>35</sup> Its chairman, Leon R. Kass of the University of Chicago, has made his views on research cloning for stem cell retrieval rather clear. Within days of the announcement that human embryos had been cloned for this purpose, speaking on a national news program, he said:

The Congress of the United States by a margin of over 100 votes, including 60 Democrats, enacted legislation [sic]<sup>36</sup> designed to stop all human cloning from the very start. Here we have a group of entrepreneurs who, for their own good reasons and confident that their good intentions are sufficient unto the day, crossed this line in defiance of all of these things. I don't think that's the right way for us to proceed.<sup>37</sup>

He has also said that the mandate of the President's Council on Bioethics will go beyond merely monitoring stem cell research and will extend to a comprehensive public discussion of how to embrace the promise of biomedical advances without losing sight of "human decency, human dignity, and respect for life."<sup>38</sup> Concerns, however, have already been expressed about what meaning the new Council's chair will attribute to this phrase, as his previous writings have consistently expressed skepticism about the wisdom of things as varied as *in vitro* fertilization, autopsies, and the feminist movement.<sup>39</sup> Those concerns have mounted with the appointment of Dean Clancy, a conservative policy aide to Rep. Dick Armey, as the new executive director.<sup>40</sup> Clancy is known not only for his opposition to constitutional protection for abortion rights,<sup>41</sup> but also for advocating, amongst other things, a repeal of the Seventeenth

Amendment,<sup>42</sup> which provides for the direct election of United States Senators, and for the elimination of all public funding for schools.<sup>43</sup>

John Adams once wrote, “This country has done much, I wish it may do more, and annul every narrow idea in religion, government and commerce.”<sup>44</sup> The President and the chair of the new Council on Bioethics are surely, like all Americans, entitled to their personal faith and vision. But should the day come when that vision is shown to be too narrow to accommodate the needs of research on behalf of all Americans,<sup>45</sup> one hopes that the vision may broaden to encompass the diversity of all human experience and all human faiths. One hopes that government policies will continue to evolve to protect the interests of all citizens.

## References

1. Francine Kiefer, *A Call for Federal Oversight of Fertility Clinics*, CHRISTIAN SCI. MONITOR, Aug. 21, 2001, at 2; Tom Sheehan, *Thinking Over Push for Ban; State Bill Sponsors Are Looking at Any Differences with the President's Stem-Cell Guidelines*, WIS. ST. J., Aug. 11, 2001, at B4.
2. *Hurried Senators Drop Stem Cell Proposals*, N.Y. TIMES, Nov. 2, 2001, at A22; *Labor-HHS: Stem Cells, Cloning Dropped from Spending Bill*, AM. HEALTH LINE, Nov. 2, 2001; *Senate Fails To Complete Action on Labor-HHS Measure*, NAT'L J'S CONGRESS DAILY, Nov. 2, 2001.
3. Gina Kolata & Andrew Pollack, *A Breakthrough on Cloning? Perhaps, or Perhaps Not Yet*, N.Y. TIMES, Nov. 27, 2001, at A1; Jose B. Cibelli et al., *The First Cloned Human Embryo*, at <http://www.sciam.com/explorations/2001/112401ezzell/>.
4. Sheryl G. Stolberg, *Bush Denounces Cloning and Calls for Ban*, N.Y. TIMES, Nov. 27, 2001, at A12; Press Release, Associated Press, Senate to Vote on Two Bills (Nov. 30, 2001) (on file with author); Press Release, Sam Brownback, United States Senate, Brownback Holds News Conference in Response to Human Cloning (Nov. 26, 2001) (on file with author).
5. SIMON MAWER, MENDEL'S DWARF 238 (1998).
6. Sheryl G. Stolberg, *Bioethicists Find Themselves the Ones Being Scrutinized*, N.Y. TIMES, Aug. 2, 2001, at A1.
7. Press Release, Office of the Press Secretary, White House, *Remarks by the President on Stem Cell Research* (Aug. 9, 2001) [hereinafter *Bush*], <http://www.whitehouse.gov/news/releases/2001/08/20010809-2.html>. The policy will require researchers to use only cells collected from embryos created for reproductive—rather than research—purposes, and donated without compensation and with informed consent. Most importantly, the embryos must have been destroyed before the President's announcement. His goal was to eliminate not only the remote possibility that future decisions to discard embryos might be influenced by the prospect of federal support for research on stem cells derived from them, but also the appearance that such influence might exist. The President said that approximately sixty lines of the cells existed worldwide at the time of his announcement. He reiterated his position on research cloning and, indeed, extended it to endorse a prohibition not only on government financing of the technique, but also on privately financed efforts to develop cloned human embryos for stem cell retrieval and research. See also *Bush Says Cloning Is Morally Wrong, Urges Congressional Ban*, BULLETIN'S FRONTRUNNER, Nov. 27, 2001.
8. The Bush Administration policy requires not only that the stem cells were harvested prior to August 9, but also that they were derived from embryos left over from fertility procedures—as opposed to having been created solely for the purpose of stem cell retrieval—and that they have been obtained without inducement and with the informed consent of the progenitors. The informed consent requirement, ironically, was loosened by Bush Administration policy. After the Clinton Administration removed the regulatory obstacles that had created a *de facto* moratorium on federal support of research on embryos, the National

Institutes of Health (NIH) appointed a Human Embryo Research Panel to recommend guidelines for its grants. See R. Alta Charo, *The Hunting of the Snark: The Moral Status of Embryos, Right-to-Lifers, and Third World Women*, 6(2) STAN. L. & POL'Y REV. 1 (1995). That panel recommended spending federal money on research on discarded, surplus embryos and on a carefully delimited range of experiments that would require the use of so-called research embryos—that is, embryos created specifically for research. The Clinton Administration announced its opposition to the latter recommendation, but before the NIH could act on the remaining recommendations, Congress enacted a series of legislative prohibitions on the use of federal money for research that destroyed embryos, and the panel's recommendations became moot. Partly in response, the NIH issued guidelines for research on human embryos that detailed the permissible uses of embryos, the consent process, and what documentation would be needed. See National Institutes of Health Guidelines for Research Using Human Pluripotent Stem Cells, 65 Fed. Reg. 51,976 (Aug. 25, 2000). Those guidelines required that the cell lines be derived from embryos that had been frozen before being discarded, in order to ensure that they were not needed for reproductive purposes and that they had been given to researchers after the donors had some period of time for reflection. President Bush was forced to avoid endorsing that requirement, lest an inordinate number of the existing cell lines turn out to be ineligible because they had been derived from fresh, rather than frozen, embryos. To that extent, the new policy retreats from the most conservative view of informed consent for donation.

9. Additional details of the human subjects research regulations that will apply to embryo and stem cell research have been announced. See OFF. HUMAN RES. PROTECTIONS, DEP'T HEALTH & HUMAN SERVS., GUIDANCE FOR INVESTIGATORS AND INSTITUTIONAL REVIEW BOARDS REGARDING RESEARCH INVOLVING HUMAN EMBRYONIC STEM CELLS, GERM CELLS AND CELL-DERIVED TEST ARTICLES (Nov. 16, 2001), <http://ohrp.osoph.dhhs.gov/references/HESCGuidance.pdf>.

10. Religious leaders have made varying statements on whether their particular denominations or religions can support stem cell research and, more specifically, research cloning to generate stem cells. Many Christian denominations have voiced opposition, while others remain silent; Jewish groups have been either supportive or silent; and Islamic groups are still working to reach a consensus. See Press Release, Associated Press, *Religious Leaders Split on Cloning* (Nov. 27, 2001) (on file with author).

11. NAT'L BIOETHICS ADVISORY COMM'N, MEETING TRANSCRIPT 185 (Mar. 13, 1997), <http://bioethics.georgetown.edu/nbac/transcripts/1997/3-13-97.pdf>.

12. *Id.* at 152.

13. MAWER, *supra* note 5, at 238-39.

14. Stolberg, *supra* note 6, at A1.

15. Helen T. Gray, *Ethicists, Theologians and Clergy Urge Caution in Development of Cloning Technology*, KAN. CITY STAR, Mar. 8, 1997, at E1.

16. NAT'L BIOETHICS ADVISORY COMM'N, MEETING TRANSCRIPT 9 (Mar. 14, 1997), <http://bioethics.georgetown.edu/nbac/transcripts/1997/3-14-97.pdf>.

17. *Id.* at 17.

18. *Id.* at 51.

19. R. Alta Charo, *Embryo Research: An Argument for Federal Funding*, 4(6) J.

WOMEN'S HEALTH 603, 603-08 (1995).

20. *Bush*, *supra* note 8.

21. AM. LIFE LEAGUE, ANALYSIS OF PRESIDENT GEORGE W. BUSH'S STEM CELL DECISION ("In summary, through the use of his carefully weighed rhetoric, the President consistently worked to undermine the fundamental, irrefutable scientific fact at the core of this issue: that human life begins at conception/fertilization and that there is never an acceptable reason for intentionally taking an innocent human life. While even supposedly presenting the pro-life perspective in portions of his presentation, he used terms such as 'potential life,' 'cluster of cells,' 'seeds,' 'byproduct,' and strategically omitted 'human' in key places serving to obfuscate these scientific and ethical realities."); <http://www.all.org/news/index.htm>.

22. Thomas Nagel, *Moral Epistemology*, in SOCIETY'S CHOICES: SOCIAL AND ETHICAL DECISIONMAKING IN BIOMEDICINE 201, 212 (Ruth Bulger et al. eds., 1995).

23. Richard Doerflinger, spokesperson for the U.S. Conference of Catholic Bishops, in personal communication with the author on November 9, 2001, remarked that some people have made just such a pledge, but that in general no such pledge would be demanded of embryonic stem cell research opponents. It is likely that they will face situations in which, due to evolving funding policies in this area, the only therapy that has been developed is one that is based upon the unacceptable research.

24. For a more extended discussion of political ethics as a tool to resolve bioethics debates, see Charo, *supra* note 8.

25. NIH's Human Embryonic Stem Cell Registry (<http://escr.nih.gov/>) lists the entities that have developed stem cell

lines meeting the President's criteria for federal funding.

26. Press Release, National Right to Life Committee (Aug.10, 2001) [http://www.nrlc.org/killing\\_embryos/index.html](http://www.nrlc.org/killing_embryos/index.html). ("While we mourn the lives of those children that were killed to derive the sixty-plus stem cell lines that currently exist, there is nothing that we, as a pro-life community, or President Bush can do to restore the lives of those children. Neither President Bush nor the federal government had anything to do with the destruction of those embryos or the establishment of those cell lines. Certainly, if the President could have prevented the death of those embryos, he would have. President Bush has shown his commitment to protecting the lives that he can.").

27. Another possible source might be embryo-like entities that provide stem cells but are not viewed by opponents as having the same moral status as an embryo. One such possibility would be parthenotes (i.e., embryo-like entities created through parthenogenesis rather than fertilization or cloning). Richard Doerflinger, in personal communication with the author on November 9, 2001, said that if the parthenotes are simply non-viable embryos, then opposition would remain unchanged. See Andrew Pollack, *New Work May Provide Stem Cells While Taking Baby from Equation*, N.Y. TIMES, Nov. 6, 2001, at F3. This is because such embryos would be, roughly speaking, the equivalent of a terminally ill person, upon whom destructive research is still forbidden. However, if the parthenotes are merely pluripotent (i.e., capable of giving rise to most tissues of an organism), rather than totipotent (i.e., having unlimited capability, including the capacity to specialize into extra-embryonic membranes and tissues, the embryo, and

all post-embryonic tissues and organs), they might not be seen as having the same moral status as an embryo and could become an acceptable source for stem cells.

28. Another significant aspect of the President's announcement for researchers is its potential to decentralize stem cell research in the United States. Prior to his decision, scientists were uncertain about how the Bush administration would interpret congressional actions since 1996 that prohibit the use of federal funds for research that involve the destruction of embryos. Congress never specifically prohibited spending money to study cells from embryos that had been destroyed using private funds. Nonetheless, that uncertainty had an effect on early research on human embryonic stem cells. Scientists worried that the Administration might decide that, because of shared overhead costs, conducting research on embryonic stem cells with private money in a facility that also houses federally financed research constitutes a use of federal dollars. To avoid that possibility, the University of Wisconsin at Madison, for example, helped James A. Thomson to develop a separate research facility for his work that led to the creation of the first sustainable line of human embryonic stem cells. The sizable investment required for the creation of separate laboratories presented an obstacle to other universities that might have been pleased to see their scientists accept private funds for embryonic stem cell research. With Bush's announcement, however, comes the possibility of removing the uncertainty. Depending on how the NIH interprets the President's policy and how it interprets the significance of shared overhead, the result may be a blossoming of privately supported research on

campuses that no longer need to consider the development of separate facilities as part of the start-up costs.

29. *Stem Cell Research, Hearing Before the Senate Comm. on Health, Educ., Labor, and Pensions*, 107th Cong. (2001) (statement of Tommy Thompson, Secretary, Department of Health and Human Services) (admitting that more than half of the existing cell lines made eligible for federal research monies under the President's policy had yet to be fully characterized as embryonic stem cell lines).

30. It should be noted that some scientists have also expressed concern that the President's policy will force researchers to rely solely on patented stem cell lines—and to pay licensing fees. Such concerns are misplaced. First, the basic patents cover lines already in existence and those to be developed, so whether a researcher wishes to use federal money and study existing lines or to use private funds and study future lines, the issues concerning patents remain the same. Second, patent holders like the University of Wisconsin have already made arrangements to ensure wide access to the lines, including very low licensing fees for academic researchers, and to ensure that researchers can freely share—and even patent—their own discoveries made through stem cells. See Press Release, National Institutes of Health, *National Institutes of Health and WiCell Research Institute, Inc., Sign Stem Cell Research Agreement* (Sept. 5, 2001), <http://www.nih.gov/news/pr/sep2001/od-05.htm>.

31. Indeed, administration officials announced a few days after the President's August 9 speech, regardless of the scientific results of the work with existing lines, the government would not support research on other lines in the future. See Sheryl G. Stolberg, *U.S. Acts Quickly To Put Stem-Cell*

*Policy in Effect*, N.Y. TIMES, Aug. 11, 2001, at A1; Press Release, Sharon Theimer, Associated Press, Thompson: Bush Firm on Stem Cells (Aug. 12, 2001) (on file with author). Many scientists fear that the existing lines either may not be capable of producing all other kinds of cells or may not be robust and diverse enough to support their work. Nonetheless, a number of scientists have expressed relief that at least some funds will be available. See Sheryl G. Stolberg, *The Basic Research: A Science in Its Infancy, but with Great Expectations for Its Adolescence*, N.Y. TIMES, Nov. 27, 2001, at A12; Robin Toner, *The Reaction: Each Side Finds Something To Like, and Not*, N.Y. TIMES, Aug. 10, 2001, at A1; Rick Weiss, *Promising More—and Less, Scientists See Growth in Field*, WASH. POST, Aug. 10, 2001, at A1.

32. Gordon Grice, *Slice of Life; How a Convicted Killer's Corpse Brought Anatomy into the Digital Age*, NEW YORKER, Jul. 30, 2001, at 36.

33. *Id.*

34. The same, of course, is true for each nation and each region. The United Kingdom banned reproductive cloning, while permitting research for stem cell retrieval, and the European Union has failed to pass a proposed ban on research cloning. See Stephen Castle, *European MPs Refuse To Outlaw Human Cloning*, INDEPENDENT (LONDON), Nov. 30, 2001, at 18; Greg Hurst, *MPs Pass Bill to Forbid Cloning*, TIMES (London), Nov. 30, 2001; Michael Kallenbach, *MPs Worried by 'Panic Legislation' Human Cloning*, DAILY TELEGRAPH (London), Nov. 30, 2001, at 18; Press Release, Associated Press, *Brits OK Ban on Creating Human Clones* (Nov. 30, 2001) (on file with author). On the other hand, Germany is well known for its strict limits on embryo research generally. See Steven Kamarow, *Germany Awaits U.S.*

*Action on Stem Cells: Controversial Research Is Testing Moral Lessons from Hitler's Reign*, USA TODAY, Aug. 9, 2001, at 5A. France, Austria, and Ireland also ban or strictly limit embryo research, while Sweden permits it generally. Denmark permits it for infertility research, and many other European countries have no domestic law on the subject. See Press Release, *World Reacts to U.S. Stem Cell Plan* (Aug. 10, 2001) (on file with author). A number of Asian countries are predicted to be relatively open to embryonic stem cell research, including research that used stem cells from cloned embryos, in part because Buddhist tradition does not explicitly condemn the practice. Associated Press, *Asia Could Emerge as Stem Cell Leader* (Dec. 23, 2001).

35. George W. Bush, Executive Order: Creation of the President's Council on Bioethics (Nov. 28, 2001), <http://www.whitehouse.gov/news/releases/2001/11/20011128-13.html>.

36. It was the House, not the full Congress, that so voted; and while the bill passed in the House, no legislation will be passed until the Senate similarly acts and a bill is signed by the President.

37. *Newshour with Jim Lehrer: Interview with Leon Kass* (PBS television broadcast, Nov. 26, 2001).

38. *Face the Nation: Interview with Leon Kass* (CBS television broadcast, Aug. 12, 2001). For selected writings by Leon Kass, see <http://www.alteich.com/links/kass.htm>. This expansive view is reflected in the Charter for the Council, announced by the President. Executive Order: Creation of the President's Council on Bioethics, Nov. 28, 2001, at <http://www.whitehouse.gov/news/releases/2001/11/20011128-13.html>.

39. Chris Mooney, *Irrationalist in Chief*, 12 AM. PROSPECT 10, 10-13 (2001).

40. Arthur Allen, *Back to Nature* (Nov.

30, 2001), <http://www.salon.com/mwt/feature/2001/11/30/bioethics/index.html?x>; Press Release, Department of Health and Human Services, *Clancy Named Executive Director of National Bioethics Council* (Nov. 30, 2001) (on file with author).

41. Dean Clancy, *The Constitution's Not the Thing*, NAT'L REVIEW, Dec. 31, 1999.

42. Dean Clancy, *Forbes in 2000?*, J. AM. CITIZENSHIP POL'Y REV., Jan./Feb. 1998, at Correspondence 3.

43. See *The Separation of School & State Alliance*, at <http://www.sepschool.org>, for a list of signatories, Dean Clancy among them, for an organization advocating an end to public funding of schools. Clancy's support is noted as important and singular among government officials during a discussion by another organization allied with the Alliance. See also Interview with Marshall Fritz, Of the Separation of School & State Alliance (June 3, 1999), at <http://www.homeschoolchristian.com/ChristianEd/Fritz.html>.

44. DAVID McCULLOUGH, JOHN ADAMS 631 (2001).

45. In a development closely related to stem cell research, scientists were dismayed when the House of Representatives voted on July 31 in favor of H.R. 2505, the Human Cloning Prohibition Act. The bill includes a provision that would make it a crime to use cloning technology to make embryos for research purposes. Legislators have chosen to ignore both the fact that it would be possible to use other means to prevent the birth of children conceived through cloning—for instance, prohibiting the transfer of a cloned embryo into a woman's body—and the long history of creating embryos through in vitro fertilization for research on how to improve infertility treatments. It is

interesting to note that, to date, Congress has yet to comprehensively regulate medical experiments on children or adults—let alone make any aspects of them a crime. Instead, the government relies on conditions attached to the receipt of federal funds for research or approval by the Food and Drug Administration (FDA) of resulting products, as well as a system of voluntary compliance with federal standards by large research institutions even where federal funds or FDA approval are not at issue. But research supported by private funds that is not covered by those regulations can be conducted without fear of federal penalty, although state laws and the rules of professional societies may restrict it. The NBAC has called for federal legislation in that area, and bills to regulate such research have been recently introduced in Congress. So far, however, human research generally remains untouched by federal law. See NAT'L BIOETHICS ADVISORY COMM'N, ETHICAL AND POLICY ISSUES INVOLVING HUMAN PARTICIPANTS (2001). If the House bill on cloning becomes law, it would create significant federal limits on what some scientists consider an important and promising area of research before federal protections have been enacted to regulate research on people generally.

