Cloning Matters: How *Lawrence v. Texas* Protects Therapeutic Research

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Several states have banned therapeutic cloning,¹ and the federal government is considering legislation that would do the same.² Some of

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¹. *See, e.g., N.D. CENT. CODE 12.1-39-02.02(1)(c) (2003) (“A person may not... receive the product of a human cloning for any purpose...”). Human cloning is defined as “human asexual reproduction, accomplished by introducing the genetic material of a human somatic cell into a fertilized or unfertilized oocyte, the nucleus of which has been or will be removed or inactivated, to produce a living organism with a human or predominantly human genetic constitution.” *Id.* §12.1-39-01. Similar bans are achieved by *ARK. CODE ANN.* §§ 20-16-1001 to 20-16-1003 (2003) and *IOWA CODE ANN.* §§707b.1 to 707b.4 (2003). All of these statutes ban both reproductive and therapeutic cloning. On the distinction between reproductive and therapeutic cloning, see infra Part I.

². Human Cloning Prohibition Act of 2003, H.R. 534, 108th Cong. § 302(a)(1) (1st Sess. 2003) (“It shall be unlawful for any person... to perform or attempt to perform human cloning...”); see also *id.* § 302(a)(3) (“It shall be unlawful for any person... to... receive for any purpose an embryo produced by human cloning or any product derived from such embryo.”). The legislation also imposes a maximum penalty of ten years imprisonment for violations of these sections. *Id.* § 302(c)(1). As the text makes clear, this bill would ban human cloning whether supported by private or public funds. The federal legislation defines “human cloning” in language similar to that used by state legislatures: “Human cloning” is defined as “human asexual reproduction, accomplished by introducing nuclear material from one or more human somatic cells into a fertilized or unfertilized oocyte whose nuclear material has been removed or inactivated so as to produce a living organism (at any state of development) that is genetically virtually identical to an existing or previously existing human organism.” *Id.* § 301(1). This bill passed the House of
these laws, including the proposed federal legislation, make it a crime not only to engage in therapeutic research on a cloned embryo, but also for a patient to use any medicine derived from such research, even if the cloning took place in a country where the research is lawful. Under the United States Constitution, government action restricting freedom in this way must have at least a rational basis if it is to be upheld in court.

Opponents of therapeutic cloning argue not that medicines derived from therapeutic cloning will be unsafe or ineffective, but rather that the embryonic stem cells used in therapeutic cloning represent potential life that must be protected. I will argue, however, that this concern is not the real reason most individuals oppose therapeutic cloning. Indeed, this


3. Human Cloning Prohibition Act of 2003, H.R. 534, 108th Cong. § 302(b)-(c)(1) (1st sess. 2003) ("It shall be unlawful for any person . . . to import for any purpose an embryo produced by human cloning or any product derived from such embryo. . . . Any person . . . that violates this section shall be . . . imprisoned not more than 10 years . . . ."). As this text makes clear, there is no exclusion for products received from countries where therapeutic cloning is lawful. See, e.g., Ellen Goodman, Outlawing Science, WASH. POST, March 8, 2003, at A23. Similarly, under North Dakota law, a person may not "receive the product of a human cloning for any purpose." See N.D. CENT. CODE §§ 12.1-39.01 to 12.1-39-02.02(1)(c) (2003).

4. Both the Due Process and the Equal Protection Clauses require, at a minimum, that legislative classifications be supported by a rational basis. See, e.g., Williamson v. Lee Optical, 348 U.S. 483 (1955); Carolene Products Co. v. United States, 323 U.S. 18 (1944); see also Robert A. Schapiro & William W. Buzbee, Unidimensional Federalism: Power and Perspective in Commerce Clause Adjudication, 88 CORNELL L. REV. 1199, 1255 (2003). The Supreme Court is generally quite deferential to the legislature in applying this standard. Id. At times, however, legislative enactments have been struck down as irrational. See, e.g., Cleburne v. Cleburne Living Ctr., 473 U.S. 432 (1985) (holding that it is irrational for the state to require a residence for the mentally disabled to obtain a special use permit not generally required). In Part III, I will discuss this rational basis review standard in the context of legislation concerning cloning.

5. See infra Part II. Other grounds for opposing therapeutic cloning are also discussed in Part II.
"potential life" argument is ignored daily when some spare embryos produced as a byproduct of routine fertility treatments are destroyed while others are used for research. As I will argue below, this disparate treatment reveals that the real basis for the ban on therapeutic cloning is repugnance at the idea of cloning, driven by a sense that cloning is unnatural. I will conclude this Commentary by arguing that the Supreme Court's recent decision in Lawrence v. Texas casts serious doubt on the idea that repugnance alone is an adequate basis for a criminal statute.

I. THERAPEUTIC CLONING: SOME BACKGROUND

To understand the dispute over therapeutic cloning, it is necessary to understand the scientific terminology that underlies the debate. The term "human cloning" has come to include two distinct activities—reproductive cloning and therapeutic cloning—that begin in the same way: Nuclear material is removed from a woman's egg, and nuclear material from a donor's somatic cells is introduced in its place. The egg then begins to develop in the same manner as a traditional fertilized ovum.

In the context of reproductive cloning, this embryo would be implanted in a uterus and brought to term. No one knows if this procedure will work in humans, and there is real concern that any human born in this way will be severely disabled. The latter concern justifies regulation of reproductive cloning, much as the possibility of birth defects justifies the regulation of thalidomide.

With therapeutic cloning, there is no intention of bringing the embryo to term. After a few weeks, the stem cells are removed for research, with the hope that this research will contribute to progress in the development of treatments for individuals suffering from diabetes, Alzheimer's, and

6. See infra Part II.
other ailments. On February 12, 2004, South Korean scientists announced that they had derived stem cells from a cloned human embryo, moving the promise of therapeutic cloning closer to reality. While research remains to be done, Dr. Hwang Wee Suk, the leader of the South Korean team, is motivated by the possibility that such research will benefit patients, particularly by improving cell regeneration therapy. His efforts were inspired in part by a newlywed couple he met at a Seoul hospital. During their honeymoon the husband fell, severely damaging his spine; Hwang believed the husband “was badly in need of treatment which human embryo research could help provide.”

In the United States, in the wake of the Korean breakthrough, Dr. Ron McKay, a stem cell scientist at the National Institute of Neurological Disorders and Stroke, reported that it was now easier than previously thought to extract stem cells from cloned human embryos. McKay illustrated the potential benefits when he spoke of a scientist “who had died in her 40’s from breast cancer”; he noted that if her tissues had been cloned to make human embryonic stem cells, those stem cells could have then been used in cancer research.

II. POSSIBLE JUSTIFICATIONS FOR BANNING THERAPEUTIC CLONING

What is the justification for banning therapeutic cloning? The legislation cannot be justified on the ground that it seeks to prohibit unsafe or ineffective treatments, as the bans are not tailored in this way. Under the existing state laws and the proposed federal law, the use of medicines derived from such cloning is a crime, even if the medicines are proven to be safe and effective. Indeed, under the proposed federal law, the importation of such medicine from any jurisdiction that permits


13. Id.
15. Id.
16. See supra note 1.
17. See supra note 2.
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therapeutic cloning, such as the United Kingdom, is also a crime punishable by up to ten years in prison.\textsuperscript{18}

Do individuals have a right to use potentially life-saving medicine unless the government has a rational basis for prohibiting its use? I believe that they do. In at least a few cases, the United States Supreme Court has protected the rights of patients to control their health. For example, when the Supreme Court, in \textit{Vacco v. Quill},\textsuperscript{19} rejected a constitutional right to assisted suicide, every justice on the Court affirmed a patient's right to receive medicine to relieve pain, even if such treatment would hasten the individual's death. Justice Rehnquist, in his opinion for the Court, distinguished sharply between a doctor who assists a suicide and one who provides "aggressive palliative care."\textsuperscript{20} He further noted, "[I]n some cases, painkilling drugs may hasten a patient's death, but the physician's purpose and intent is, or may be, only to ease his patient's pain."\textsuperscript{21} The concurring opinions reiterated the right to pain relief. Justice O'Connor stressed that "[t]here is no dispute that dying patients in Washington and New York can obtain palliative care, even when doing so would hasten their deaths."\textsuperscript{22} Justice Stevens, noting that the Supreme Court had previously upheld a right to refuse treatment,\textsuperscript{23} wrote that "[a]voiding intolerable pain" was also a vital liberty interest.\textsuperscript{24} Justice Souter drew precisely the same distinction between "assistance to suicide, which is banned, and practices such as termination of artificial life support and death-hastening pain

\begin{footnotes}
\item[19] 521 U.S. 793 (1997) (holding that the Equal Protection Clause does not create a right to assisted suicide).
\item[20] Id. at 802.
\item[21] Id.
\item[22] Id. at 737-38 (O'Connor, J., concurring). Justices Ginsburg and Breyer joined in this portion of O'Connor's concurrence. Id. at 736.
\item[23] Id. at 742 (Stevens, J., concurring in the judgments). Justice Stevens explained, "In \textit{Cruzan v. Director, Mo. Dept. of Health} . . . the Court assumed that the interest in liberty protected by the Fourteenth Amendment encompassed the right of a terminally ill patient to direct the withdrawal of life-sustaining treatment." Id. at 742. Stevens also noted, "The \textit{Cruzan} case demonstrated that some state intrusions on the right to decide how death will be encountered are . . . intolerable." Id. at 745.
\item[24] Id.
\end{footnotes}
medication, which are permitted.\textsuperscript{25}

If the government cannot arbitrarily deny an individual access to death-hastening pain medication, it is at least arguable that it cannot deny access to potentially life-saving medicine without a rationale. Of course, the absence of a valid reason to ban pain medication does not, in itself, demonstrate that there is no rationale for banning therapeutic cloning. I will discuss below the rationales that have been offered for such a ban.\textsuperscript{26} The Vacco case simply supports the plausible proposition that the government cannot arbitrarily ban therapeutic cloning.

Nor does Vacco stand alone. For example, the Court has held that the state cannot arbitrarily forbid a woman from choosing an abortion procedure, even one that would otherwise be illegal, when it is necessary to protect her health.\textsuperscript{27} This suggests yet again that the Court will ask for a rational justification when the government bans a safe and effective medicine derived from therapeutic cloning.

This means, of course, that it is important to determine whether a rational basis exists for such a ban. To do this, it is necessary to consider what possible justifications exist for the criminalization of therapeutic cloning. Several commentators have suggested that allowing therapeutic cloning increases the likelihood that we will someday come to accept reproductive cloning, and that this provides sufficient justification for the ban.\textsuperscript{28} But our government does not have a free hand to regulate lawful activities because they might someday lead to unlawful ones. Otherwise little would be free from government regulation. Abortion cannot be banned because it might bring about the acceptance of infanticide. As the

\textsuperscript{25} Id. at 809-10 (Souter, J., concurring in the judgment).

\textsuperscript{26} See infra notes 28-33 and accompanying text.

\textsuperscript{27} Stenberg v. Carhart, 530 U.S. 914, 936-38 (2000) (holding that the state cannot ban "a particular abortion procedure" without a health exception for the mother when this procedure may at times be the safest for the mother). Another indication that the Court gives weight to an individual's right to receive medicine is provided in the prison context. See Estelle v. Gamble, 429 U.S. 97, 103-04 (1976) (holding that the government must provide medical care for those it incarcerates).

\textsuperscript{28} See, e.g., Janet L. Dolgin, Embryonic Discourse: Abortion, Stem Cells, and Cloning, 31 Fla. St. U. L. Rev. 101, 112, 148 (2003); Cass R. Sunstein, Is There a Constitutional Right To Clone?, 53 Hastings L.J. 987, 1004 (2002). It is hard to see how this justifies the ban on importing medicines produced by therapeutic cloning from those countries where such cloning is legal, since the U.S. ban would have no direct impact there. Indeed, the generally more liberal attitude toward embryo research in the United Kingdom as compared to the United States has spurred such research in the U.K. Sarah Baxter, Give Us a Miracle, SUNDAY TIMES (London), July 22, 2001.
Supreme Court has said, a state may not “prohibit possession of chemistry books on the ground that they may lead to the manufacture of homemade spirits.” It is no great feat to write legislation that bans reproductive cloning while allowing therapeutic cloning; indeed, some states have passed laws that do just that. If our society remains committed to prohibiting reproductive cloning, it can prohibit it without stamping out therapeutic cloning as well.

The other justification for banning therapeutic cloning turns on the status of the stem cells that are used in the process. For many Americans, these cells represent either human life or potential human life. For those with this view, banning therapeutic cloning is identical or similar to banning research on human subjects. It does not matter that such research could lead to medical breakthroughs. Our respect for human personhood is such that we require consent before we do research on people. Since no consent is possible from embryonic stem cells and since the cells may be destroyed as part of the research process, these critics argue that therapeutic cloning should be banned.

As I just indicated, this objection rests on the belief that embryonic stem cells are entitled to the protections we extend to life or potential life. The most immediate problem with this argument is that it does not reflect societal or legal attitudes, even in the states that have banned therapeutic cloning. As many observers have pointed out, there is an enormous contradiction between the concerns about therapeutic cloning and the

29. Stanley v. Georgia, 394 U.S. 557, 567 (1968) (holding that the state may not prohibit possession of obscene materials on the ground that such possession may lead to antisocial conduct).


32. Id.

33. See supra note 10.


35. See, e.g., Erwin, supra note 31; Forsythe, supra note 31.
broad acceptance of assisted reproductive technologies. In hundreds of clinics across the United States, would-be parents use in vitro fertilization techniques in which sperm and egg are brought together outside of the womb, and numerous embryos are created, only some of which are then implanted and brought to term.

The disposition of the "spare embryos" that almost invariably result from in vitro fertilization illustrates that they are not treated as human life or potential human life. They are often destroyed, either because that is the wish of the would-be parents, or because, in cases where the parents' desires are unknown, the fertility clinic destroys them. In many cases, they are frozen alive through a process called cryopreservation, and their ultimate fate is uncertain.

One might argue that therapeutic cloning is more objectionable than in vitro fertilization because the former creates embryos with the intention of destroying them after the research is completed. In the case of fertility clinics, however, the goal is to create human life, and the creation of spare embryos is only an unfortunate byproduct of that goal. In other words, it might strike some people as worse to create an embryo explicitly for medical research purposes.

There are a number of problems with this distinction. First, it is perfectly predictable that spare embryos will result from fertility treatments, so the demise of these embryos is not at all surprising. Secondly, in vitro fertilization is not always successful. Thus, the argument reduces to the belief that destroying several embryos is acceptable in the hope of producing healthy life. But if that is so, it would seem to justify therapeutic cloning, as well; there, too, embryos are destroyed, but it is with the goal of producing healthy life. Indeed, if therapeutic cloning lives up to its promise, it may save countless lives, both embryonic and full-

36. See, e.g., Rhodes, supra note 7, at 349; Sandel, supra note 10.
37. See, e.g., Shapiro et al., supra note 34, at 625-41.
38. Id.
41. Harris, supra note 39.
42. The national average for pregnancy rates from in vitro fertilization is estimated to be thirty percent. See Amy Dockser Marcus, Treatments Work To Reduce Risky Multiple Births, HOUSTON CHRON., Feb. 23, 2003, at A4. Even with the most advanced screening techniques, the success rate for in vitro fertilization for women over thirty-eight does not exceed fifty percent. Carey Goldberg, Screening of Embryos Helps Avert Miscarriage, BOSTON GLOBE, June 13, 2003, at A1.
term.\textsuperscript{43}

It is important to note that not all spare embryos from fertility clinics are destroyed; some have been used to create stem cell lines that are used for scientific research.\textsuperscript{44} In August 2001, after much deliberation and publicity, President Bush announced that federal funding would be allowed for research on existing stem cell lines, but not for new lines created from spare embryos after the date of his announcement.\textsuperscript{45} The President, because he gave weight to the view that embryos are potential life, did not want to encourage the creation of stem cell lines for research purposes.\textsuperscript{46} However, by only withholding federal funding, he permitted such research to continue, so long as private funding is available. And stem cell research on non-cloned embryos has, in fact, continued since President Bush's announcement. On March 3, 2004, Harvard researchers announced that they had used private funding to create seventeen new stem cell lines for research purposes, more than doubling the world's available supply.\textsuperscript{47} Eleven million dollars in private funding is supporting similar research at the University of California at San Francisco, while Harvard plans to raise one hundred million dollars to continue its efforts.\textsuperscript{48}

Thus, the inconsistency between the effort to ban therapeutic cloning and the acceptance of privately funded stem cell research on non-cloned embryos is clear. The proposed federal legislation criminalizes not only the importation of any medicine produced by human cloning anywhere in the world,\textsuperscript{49} but also research on cloned human embryos no matter whether privately or publicly funded.\textsuperscript{50} Why should it be a crime to use your own money to do stem cell research on cloned embryos, but perfectly lawful to use your own money to do stem cell research on spare embryos from fertility clinics?

This question reveals what really is at stake here: Cloning matters. It is opposition to cloning that fuels the drive to criminalize promising science. It is not a concern for potential life, as some opponents of such research

\begin{footnotes}
\item[43] Sandel, supra note 10.
\item[44] See Rick Weiss & Justin Gillis, New Embryonic Stem Cells Made Available, WASH. POST, March 4, 2004, at A02 (discussing the creation of stem cell lines from human embryos donated by a fertility clinic).
\item[45] For a transcript of President Bush's speech on stem cell research, see The President's Decision, N.Y. TIMES, Aug. 10, 2001, at A16.
\item[46] Id.
\item[47] Weiss & Gillis, supra note 44.
\item[48] Id.
\item[49] See supra note 3.
\item[50] See supra note 2.
\end{footnotes}
suggest. How could that be the reason, when we know that the law permits research on spare embryos, which represent as much potential for life as cloned embryos? Cloning matters; and, in an important sense, this has been clear from the beginning of the debate about therapeutic cloning.

III. CLONING MATTERS AND THE LAWRENCE RESPONSE

Leon R. Kass, the Chairman of the President's Council on Bioethics, is the most articulate opponent of all forms of human cloning. He grounds his opposition in the "repugnance" that so many feel toward cloning, and he argues that "repugnance is the emotional expression of deep wisdom, beyond reason's power fully to articulate it." He observes that most opponents of human cloning describe it as "Offensive. Grotesque. Revolting. Repugnant. Repulsive." He extends his criticism to both reproductive and therapeutic cloning.

Kass has voiced an important truth: Many share a profound feeling that cloning an embryo is unnatural and unsettling. In opposing both therapeutic and reproductive cloning, one member of the House of Representatives called them "ghoulish," while a Bush Administration official called them "repugnant."

But is repugnance alone an adequate basis for a governmental ban on medicines derived from therapeutic cloning? The Supreme Court's recent decision in Lawrence v. Texas suggests that it is not. In Lawrence, the Court struck down a Texas law that criminalized homosexual sodomy. As was widely noted, Justice Kennedy's opinion for the Court affirmed the liberty interest all individuals have in engaging in intimate sexual conduct. Less widely noted, but equally important, was the respect the Court's opinion showed for those who oppose homosexuality. The Court did not trivialize

52. Kass, supra note 51, at 686 (internal quotation marks omitted).
53. Id. at 685-86.
57. Id. at 2484.
their concerns, but argued instead that feelings of repugnance toward a practice, even when shared by a majority of the community, cannot overcome the beliefs of the minority:

The condemnation [of homosexuality] has been shaped by religious beliefs, conceptions of right and acceptable behavior, and respect for the traditional family. For many persons these are not trivial concerns but profound and deep convictions accepted as ethical and moral principles to which they aspire and which thus determine the course of their lives. These considerations do not answer the question before us, however. The issue is whether the majority may use the power of the State to enforce these views on the whole society through operation of the criminal law.58

Of course, there are differences between the issues decided in Lawrence and the ones at stake in the debate about cloning. But the similarities are striking: Prohibiting a ban on therapeutic cloning shows no disrespect to the views of those who find cloning profoundly unnatural; such a ban simply says that those views alone cannot provide the rational basis necessary to justify a criminal ban on therapies that may save lives.

The similarities extend to Justice O'Connor's concurrence in Lawrence. O'Connor did not agree with the five Justices who joined the Court's opinion which held that Texas had violated the liberty interests of gays.59 But she found the Texas statute unconstitutional on other grounds. O'Connor noted that in Texas sodomy was a crime if engaged in by same-sex couples, but was perfectly legal when engaged in by opposite-sex partners. She found that such an irrational distinction violated the Equal Protection Clause.60 It is noteworthy that O'Connor did not rely on equal protection cases in which the Court applied strict scrutiny to legislation creating racial distinctions.61 She simply applied the more deferential "rational basis review" applicable when "challenged legislation inhibits personal relationships,"62 yet, even under this deferential standard, she found the statute unconstitutional.

Here again, while there are differences between the two situations,

58. Id. at 2480.
59. Id. at 2484 (O'Connor, J., concurring in the judgment).
60. Id. at 2484-88 (O'Connor, J., concurring in the judgment).
61. See, e.g., McLaughlin v. Florida, 379 U.S. 184, 191-92 (1964) (contrasting the deference accorded to ordinary legislative classifications with the far more demanding "strict scrutiny" of racial classifications).
there is a remarkable parallel with the cloning dispute. Imagine two patients: one who would benefit from a drug that came from research on spare embryos and another who wanted to use a drug that came from research on cloned embryos. Why should the first be free to take the medicine while the second one goes to jail? Once more, Lawrence suggests that repugnance at cloning is not an adequate answer.

This still does not exhaust the similarities between Lawrence and the cloning dispute. In Lawrence, for example, the Court’s opinion found it significant that other countries did not criminalize the sexual conduct at issue, and Texas had not shown that it had an interest that was “somehow more legitimate or urgent.” The same point might be made about therapeutic cloning, where research proceeding overseas may lead to treatments, and the United States has not demonstrated why it has an urgent need to prevent its citizens from receiving such treatments.

Lawrence did not come out of nowhere. In 1996, the Supreme Court, in Romer v. Evans, struck down an amendment to the Colorado constitution that prohibited all governmental action designed to protect gays from discrimination. Justice Kennedy’s opinion for the Court said this amendment could be upheld if it simply bore “a rational relation to some legitimate end,” but the amendment failed even that modest test because it was “inexplicable by anything but animus” toward gays. As Lawrence demonstrates, repugnance is no better a justification.

IV. CONCLUSION

The United States government, at both the federal and state level, faces a choice: It can ban therapeutic cloning, or it can allow it to proceed. A ban is an unwise policy of doubtful constitutionality. Preventing the development and importation of medicine derived from therapeutic cloning does not serve valid policy goals. Rather, it is based on a sense of

63. Id. at 2483.
64. On the regulation of therapeutic cloning abroad, see Rhodes, supra note 7. Rhodes notes that the United Kingdom and Japan allow therapeutic cloning, while Germany avoids the inconsistency in American policy by banning all genetic research on embryos. Id. at 351-55.
66. Id. at 631.
67. Id. at 632. The failure of the Colorado amendment to survive the deferential rational basis test was unusual, but not unprecedented. See Robert C. Farrell, Successful Rational Basis Claims in the Supreme Court from the 1971 Term Through Romer v. Evans, 32 IND. L. REV. 357 (1999).
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repugnance that should not drive public policy. Thus, therapeutic cloning should be allowed in the United States.

Allowing therapeutic cloning does not necessitate allowing reproductive cloning. Patients seeking medical treatment may be limited in their search if the treatment is not safe or effective. Reproductive cloning can be banned for this reason. But a ban on therapeutic research before we know whether it will lead to safe and effective therapies, and a ban on importing medicines derived from therapeutic cloning even if such medicines are safe and effective, cannot be justified on this ground. Indeed, virtually any form of scientific and medical research can be turned to unlawful ends, but no one seriously believes that we should abandon science and medicine as a result.

Additionally, therapeutic cloning cannot be banned because of the status of the cloned embryos that are involved. We allow private research on non-cloned embryos that are a by-product of routine in vitro fertilization; in fact, we even allow such non-cloned embryos to be destroyed. It is irrational to treat cloned embryos differently.

It is not surprising that these arguments for banning therapeutic cloning are unpersuasive. They are unpersuasive because they conceal the central reason why opponents condemn cloning: They find it repugnant. However heartfelt that feeling is, it cannot serve as a legitimate basis for criminal statutes that deprive patients of the opportunity to receive potentially life-saving medicines. Our courts have allowed patients access to pain relief that hastens death and to controversial abortion procedures despite public opposition. As Lawrence demonstrates, repugnance alone cannot provide a rational basis for legal distinctions that harm individuals.

Cloning matters. It matters in the sense that it explains the motivation behind the proposed bans. But it also matters in the sense that therapeutic cloning is a promising avenue to innovative treatments for serious diseases. This avenue should not be blocked before its true value as a research tool can be conclusively determined.