

## United States Proposed Laws - Cloning

Dolly lived and died, as have many proposed laws about the technology that created her.

Dolly was born in 1996, and despite the controversy she created, the federal government has not passed a cloning bill. In 1997, President Clinton issued an order forbidding the use of federal funds for human cloning, but that ban has little effect on fertility and research clinics that do not receive federal funding. Animal cloning experiments are proceeding, and some are still intent on creating human clones, despite the unanimous conclusion of the U.S. National Academy of Sciences that calls for a ban on cloning to bring about the birth of a human child.<sup>1</sup>

The U.S. Congress has considered many bills to ban the creation of children through cloning,<sup>2</sup> and there are three pending federal bills concerning human cloning. Cloning has received even [considerably] more attention from the states; in 2002 and 2003, 133 separate bills dealing with cloning were introduced in 38 states.

At the federal level, one bipartisan bill, sponsored by Representatives David Weldon and Bart Stupak, has been passed by large majorities in two successive congresses. The bill passed 107<sup>th</sup> Congress on July 31, 2001 by a recorded vote of 265-162 and again in the 108<sup>th</sup> Congress on February 27, 2003 by a recorded vote of 241-155.<sup>3</sup> Its supporters span not simply both sides of the aisle, but include noted pro-choice advocates as well as those who are pro-life. One prominent supporter was Bernard Sanders, the independent socialist from Vermont, who made a floor speech in support of a bill whose key sponsor is a conservative republican. The Weldon-Stupak bill would impose fines of up to \$1 million as well as jail time for any person who attempts to clone humans for any purpose.<sup>4</sup> In the Senate, a parallel bill sponsored by Senator Sam Brownback (R-KS) and Senator Mary Landrieu (D-LA) also draws pro-life and pro-choice support to ban all forms of human cloning [is proposed] (S. 245).<sup>5</sup> S. 245 would make it unlawful to attempt, or to participate in an attempt, to perform research cloning or cloning to bring about the birth of a child. The bill also makes it unlawful to “ship or receive” a cloned embryo or “any product” derived from a cloned embryo.

Another bill, S. 303, sponsored by Republicans and Democrats alike such as Diane Feinstein (D-CA) and Orrin Hatch (R-UT), defines cloning as “implanting or attempting to implant the product of nuclear transplantation into a uterus or the functional equivalent of a uterus,” and thus appears to oppose all cloning while in fact using this definition to protect the cloning of embryos for research.<sup>42</sup> Because of its “definition” of cloning as implantation, the bill has to create a new term to describe the clonal embryo. It refers to the clonal embryo as an “unfertilized blastocyst” or “an intact cellular structure that is the product of nuclear transplantation,” which betrays the linguistic gymnastics at work, since blastocysts do not get fertilized; eggs are fertilized and thereupon become blastocysts, except in the case of somatic cell nuclear transfer where, by definition, fertilization is not needed to create the embryo.

Among the 133 separate state proposed laws concerning human cloning is California's "Biomedical Research and Development Act of 2004."<sup>6</sup> That proposed law explicitly encourages human research cloning by awarding grants or loans to public or private institutions conducting stem cell research. The bill is currently listed as "inactive."

Twenty-seven of the 38 states introduced bills that would ban cloning to bring about the birth of a child,<sup>7</sup> but many of the proposed laws are imprecise. For example, some of the proposals prohibit replication only of a "genetically identical" individual.<sup>8</sup> There is a loophole in these bills because the current cloning technique does not create a "genetically identical" replicate because the clone would have mitochondrial DNA from the egg donor and DNA from the somatic cell donor, and therefore would be slightly genetically different than both donors.<sup>9</sup> Other states' proposals close the loophole by prohibiting replication of a "virtually genetically identical" individual.<sup>10</sup>

Some bills speak of a ban on transferring a human cell into a human egg cell.<sup>11</sup> But scientists at the University of Wisconsin showed that cow eggs could serve as hosts for nucleic DNA of other mammalian species,<sup>12</sup> and these proposals could be evaded by transferring a human cell into a non-human egg. California's proposal SB §133 closes the loophole by prohibiting live birth cloning using a human or non-human egg.<sup>13</sup>

Twenty-six states have proposals concerning research cloning, which fall all along the spectrum.<sup>14</sup> Two states have at least one bill that would ban research cloning and at least one bill that would allow it.<sup>15</sup> Some states prohibit all cloning by referring to the creation of any human organism through somatic cell nuclear transfer,<sup>16</sup> whereas others prohibit research cloning by including within the ban the "derivation of any product from human cloning."<sup>17</sup> Louisiana's proposal encourages researchers to conduct stem cell research using human adult or placental tissues, but discourages stem cell research involving human embryonic or fetal tissue.<sup>18</sup> The preamble of Michigan's HR 189 opposes the White House's decision to allow limited stem cell research by researchers that receive federal funding, and the substance of HR 189 urges state universities to refrain from funding or conducting embryonic stem cell research.<sup>19</sup> By contrast, New York and Indiana have proposed bills that explicitly allow research cloning.<sup>20</sup>

Twelve states saw bills that would specifically allow embryo stem cell research using cells derived "from any source."<sup>21</sup> While the bills literally say "from any source," some also have a list indicating that it includes human embryonic stem cells, human embryonic germ cells, and human adult stem cells from any source, including somatic cell nuclear transplantation.<sup>22</sup> Eleven of the states proposing to allow embryo stem cell research contain provisions that would require physicians undertaking *in vitro* fertilization to discuss options for the disposition of frozen embryos, including donation to research.<sup>23</sup> One of those states, Pennsylvania, would require that the research be assessed by a state department,<sup>24</sup> but in all ten others, and in a different Pennsylvania proposal, any research must be assessed by an institutional review board.<sup>25</sup> A Kentucky

bill requires that individuals engaged in research cloning must register their name, address, and phone number.<sup>26</sup>

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<sup>1</sup> Nat'l Research Council, *Scientific and Medical Aspects of Human Reproductive Cloning* 1 (2002), "Human reproductive cloning . . . is dangerous and likely to fail. The panel therefore unanimously supports the proposal that there should be a legally enforceable ban on the practice of human reproductive cloning. . . . The scientific and medical considerations related to this ban should be reviewed within 5 years. The ban should be reconsidered only if at least two conditions are met: (1) a new scientific and medical review indicates that the procedures are likely to be safe and effective and (2) a broad national dialogue on the societal, religious, and ethical issues suggests that a reconsideration of the ban is warranted." *Id.* at ES-1 to ES-2. *See also* Nat'l Research Council, *Stem Cells and the Future of Regenerative Medicine* (2001).

<sup>2</sup> For example, in the 107<sup>th</sup> Congress (2000-02) the House considered two rival bills, one to ban all cloning and the other focused on banning live birth cloning that would require the destruction of embryos cloned for experimental purposes. The comprehensive ban was passed by a large majority in the House, but stalled in the Senate. *See* H.R.234, H.R.534.

<sup>3</sup> *See* <http://thomas.loc.gov>.

<sup>4</sup> H.R.234, to amend title 18, United States Code, to prohibit human cloning. Sponsor: Rep Weldon, Dave [FL-15] (introduced 1/8/2003), Cosponsors: 102. Action: 3/6/2003 Referred to House subcommittee; H.R.534, to amend title 18, United States Code, to prohibit human clones. Sponsor: Rep Weldon, Dave [FL-15] (introduced 2/5/2003), Cosponsors: 140. Action: 3/3/2003 Read the second time. Placed on Senate Legislative Calendar under General Orders. Calendar No. 23; H.RES.105, Providing for consideration of the bill (H.R. 534) to amend title 18, United States Code, to prohibit human cloning. Sponsor: Rep Myrick, Sue [NC-9] (introduced 2/26/2003). Action: 2/27/2003 Passed/agreed to in House; available at <http://thomas.loc.gov>.

<sup>5</sup> S.245: A bill to amend the Public Health Service Act to prohibit human cloning. Sponsor: Sen Brownback, Sam [KS] (introduced 1/29/2003), Cosponsors: 28. Action: 1/29/2003 Referred to Senate committee; available at <http://thomas.loc.gov>.

<sup>6</sup> CA SB 788 (introduced February 21, 2003 by Sen. Oritz).

<sup>7</sup> AL HB 9; AL SB 314; AZ HB 2108; CA SB 133; CA AB 267; CA SB 1557; CO HB 1073; CT SB 407; CT HB 5639; CT SB 410; DE SB 55; DE SB 329; DE SB 344; FL HB 285; FL SB 1726; FL HB 805; FL SB 1164; IL HB 253; IN HB 1538; IN HB 1984; IN SB 151; IN SB 138; KS HB 2736; KY HB 138; KY HB 153; KY HB 265; LA HB 472; LA HB 1810; MA HB 1280; MA HB 3125; MA HB 2048; MA HB 2052; MA SB 1917; MO HB 163; MO HB 209; MO HB 1449; MO SB 191; NE LB 602; NE LB 1067; NH HB 1464; NJ AB 2040; NJ AB 2840; NJ AB 1379; NJ SB 542; NY AB 1819; NY AB 3295; NY AB 4533; NY AB 6249; NY SB 206; NY SB 7638; NY SB 612; NY SB 3013; OK HB 1130; OK HB 2011; OK HB 2036; OK HB 2142; OK SB 1552; OR HB 2538; OR HB 2504; SC HB 3819; SC HB 4408; SC SB 820; TN HB 1075; TN SB 1515; TN HB 2675; TN SB 2295; TX HB 1175; TX SB 1034; TX SB 156; VT HB 326; WA HB 1461; WA SB 5466; WA HB 2173; WA SB 5571; WV HB 2832; WV SB 402; WV SB 514; WI AB 104; WI AB 246; WI SB 45; WI SB 699; WI AB 736; WI SB 404.

<sup>8</sup> *See, e.g.*, IN HB 1538 § 1; IN SB 151 § 1.a; MO HB 163 § 565.305; TN HB 1075 § 1; TN SB 1515 § 1.

<sup>9</sup> Unless, of course, one used an egg from the to-be-cloned person's own mother.

<sup>10</sup> *See, e.g.*, CA SB 133 § 1; FL SB 1726 § 2.A; KY HB 153 § 1.A; NE LB 602 § 2.2; OK HB 1130 § C.1; SC SB 820 § 2.1; SC HB 3819 § 2.1; WI SB 45 § 1.c; WI AB 104 § 1.c.

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<sup>11</sup> See, e.g., DE SB 55 § 3002; IL HB 253 § 10.c; NH HB 1464 § 141-J:2; NY SB 206 § 3230; NY SB 7638 § 3230; OR HB 2538 § 1.

<sup>12</sup> See Robert Lee Holtz, “Cow Eggs Used as Incubator in Cloning Boon,” *L.A. Times*, January 19, 1998, at A1.

<sup>13</sup> See, e.g., CA SB 133 § 1.

<sup>14</sup> AL HB 9; AZ HB 2108; CA SB 133; CA SB 1557; CO HB 1073; CT SB 407; CT HB 5639; DE SB 55; FL HB 805; FL SB 1164; FL SB 1726; IL HB 253; IN HB 1538; IN HB 1984; IN SB 151; IN SB 138; KS HB 2736; KY HB 138; KY HB 153; LA HB 1810; MA HB 3125; MO HB 1449; NE LB 602; NH HB 1464; NJ AB 2040; NY AB 4533; NY AB 6249; NY SB 206; NY SB 3013; NY SB 7638; OK HB 1130; OK HB 2011; OK HB 2142; OK SB 1552; OR HB 2538; SC HB 3819; SC SB 820; SC HB 4408; TN HB 1075; TN SB 1515; TX HB 1175; TX SB 156; WA HB 2173; WA SB 5571; WV HB 2832; WV SB 402; WV SB 514.; WI SB 699; WI AB 104; WI AB 736; WI SB 404; WI SB 45.

<sup>15</sup> See, e.g., Indiana and New York.

<sup>16</sup> See, e.g., FL SB 1726.

<sup>17</sup> See, e.g., NE LB 602.

<sup>18</sup> LA HCR 29A.

<sup>19</sup> MI HR 189.

<sup>20</sup> IN HB 1984; NY AB 6249; NY SB 3013.

<sup>21</sup> CA SB 771; CA SB 1272; IL HB 3589; MD HB 482; MA HB 2052; MA HB 1280; NJ AB 2840; NJ SB 1909; NY AB 1819; NY SB 612; PA HB 2984; PA HB 422; PA HB 945 (limited to those from fertility clinics); RI SB 266; TN HB 945; TN SB 1654; TX SB 1034; VT HB 326; WA HB 1461; WA SB 5466.

<sup>22</sup> See, e.g., IL HB 3589 § 10.2.

<sup>23</sup> CA SB 771; CA SB 1272; IL HB 3589 (does not require doctor to inform patient of embryo disposition options, but requires written informed consent); MA HB 2052; MA HB 1280; NJ AB 2840; NJ SB 1909; NY AB 1819; PA HB 2984; PA HB 422; PA HB 945 (does not require doctor to inform patient of embryo disposition options, but requires written informed consent); RI SB 266; TN HB 945; TN SB 1654; TX SB 1034; VT HB 326; WA HB 1461; WA SB 5466.

<sup>24</sup> PA HB 2984; PA HB 422.

<sup>25</sup> CA SB 322; CA SB 771; CA SB 1272; IL HB 3589; MD HB 482; MA HB 1280; MA HB 2052; NJ AB 2840; NJ SB 1909; NY AB 1819; RI SB 266; TN HB 945; TN SB 1654; TX SB 1034; VT HB 326; VA HB 639.

<sup>26</sup> KY HB 265.