

International Legal Situation - Cloning

There is a clear trend in the international context toward a prohibition on all use of human cloning. The Canadian Parliament has just passed legislation comprehensively banning human cloning¹ The Federal Government of Australia, which like that of Canada permits embryo research in some circumstances, has also passed a comprehensive cloning ban. Germany passed a forward-looking, comprehensive cloning ban in 1990. Mexico has also passed such a ban, and France is in the process of doing so with government support. Similarly, a proposal to ban cloning to bring about the birth of a child and research cloning has been approved by Brazil's Chamber of Deputies, but it needs approval from Brazil's Senate before becoming a law.²

Altogether, 30 nations have now enacted comprehensive cloning prohibitions. Another 16 have laws that prohibit cloning for purposes of live birth. Many governments, such as that of the United States, are opposed to all uses of this technology in human beings, but have yet to pass legislation to give effect to their position. Five countries -- the United Kingdom, China, Singapore, Belgium, and Cuba -- have adopted public policy positions that specifically encourage research cloning.³

Some countries have instituted moratoria in order to assess the impact of cloning and other reproductive technologies. In 1998, Israel adopted a five year moratorium on human cloning, defining cloning as "the creation of an entire human being, who is genetically identical to another person or fetus, alive or dead."⁴ The same law banned interventions to create a child through the use of reproductive cells that have undergone a permanent intentional genetic modification.⁵ Spain and Belgium are also using a five year period to assess human cloning.⁶

Some countries' human cloning laws use ambiguous language or are based on assumptions that render the laws' effects unclear. For example, Spain, Victoria Australia and Western Australia prohibit cloning to bring about an identical human being.⁷ But because cloning includes mitochondrial DNA from the egg donor, the clones are not genetically identical. (This ambiguity also exists in Rhode Island's cloning law.)

Countries that ban embryo research may not actually prohibit cloning to bring about the birth of a child or research cloning because somatic cell nucleus transfer (SCNT) may not be considered embryo research.⁸ SCNT utilizes an experimental procedure of injecting a somatic cell into an enucleated egg, resulting in a cloned embryo.⁹ Once the cloned embryo is created, it can be implanted into a surrogate using standard *in vitro* fertilization techniques. There is, therefore, no "experiment" after the cloned embryo is created.

Britain believed that it had a law that prevented human cloning. The Human Fertilisation and Embryology Act of 1990 (HFEA) requires that activities that fall within the HFEA -- such as the creation, storage, handling and use of human embryos -- may be undertaken only if they explicitly fall within the law or are approved by the

Human Fertilisation and Embryology Authority.¹⁰ The HFEA defines an “embryo” as a “live human embryo where fertilisation is complete” or “an egg in the process of fertilisation.”¹¹ Parliament assumed that because cloning to create a human embryo did not fall within the law, such conduct was prohibited.¹²

But in November 2000, the Pro-Life Alliance brought suit claiming that cloned embryos are not covered by HFEA. On November 15, 2001, the British High Court of Justice, Queen’s Bench Division, Administrative Court, agreed, stating: “With some reluctance, since it would leave organisms produced by CNR [cell nuclear replacement] outside the statutory and licensing framework, I have come to the conclusion that to insert these words would involve an impermissible rewriting and extension of the definition.”¹³ A higher court overturned the ruling, finding that human embryo cloning was in fact covered by HFEA,¹⁴ but not before the Parliament had already passed a new law criminalizing the act of placing “in a woman a human embryo which has been created otherwise than by fertilisation.”¹⁵ Britain’s new law permits research cloning as long as the cloned embryo is destroyed within fourteen days.

The member States of the Council of Europe and other States in the European Community addressed the issue of human cloning in the Convention on Human Rights and Biomedicine. In 1997, the 19 countries party to the Convention signed a treaty that contains an additional protocol expressly prohibiting “any intervention seeking to create a human being genetically identical to another human being, whether living or dead.”¹⁶ The protocol defines a genetically identical human being as a human being that shares the same nuclear gene set as another human being.¹⁷

In 2001, the UN General Assembly endorsed a Franco-German proposal to initiate discussions towards an international convention to prohibit cloning to bring about the birth of a child. Many states, including the United States, took the view that they would support only a comprehensive prohibition on human cloning for whatever purpose.¹⁸ During meetings of the UN’s Sixth Committee in 2003, facing major domestic criticism for its position opposing a comprehensive cloning ban, the German federal government withdrew its leading role in the debate, leaving Belgium to propose a convention that would include a ban on cloning to bring about the birth of a child and either a ban, or regulation of, research cloning.¹⁹ A resolution proposed by Costa Rica seeking a comprehensive ban gained 66 co-sponsors, against 22 for the Belgian Resolution.²⁰ However, in November 2003, the Sixth Committee voted 80-79, and 15 abstentions, in favor of a procedural motion by Iran offered on behalf of the Organization of the Islamic Conference (OIC) (15 of whose members were in fact co-sponsors of the Costa Rican resolution) to suspend the discussion until 2005.²¹ But after informal discussions in the general assembly, it was agreed to return to the matter in the Fall of 2004.

¹ The bill is titled Bill C-6, “An Act Respecting Assisted Human Reproduction and Related Research.”

² See Cassio Leite Vieira, "Therapeutic Cloning May be Banned in Brazil," March 23, 2004, available at <http://www.scidev.net/news/index.cfm?fuseaction=readnews&itemid=1289&language=1> (visited June 3, 2004).

³ See Center for Genetics and Society, Rosario Isasi, J.D., lead researcher, "National Policies Governing New Technologies of Human Genetic Modification: A Preliminary Survey," available at <http://www.genetics-and-society.org/policies/survey.html> (last visited June 3, 2004).

⁴ See Center for Genetics and Society, Rosario Isasi, J.D., lead researcher, "National Policies Governing New Technologies of Human Genetic Modification: A Preliminary Survey," at § 3(1), available at <http://www.genetics-and-society.org/policies/survey.html> (last visited June 3, 2004).

⁵ See Center for Genetics and Society, Rosario Isasi, J.D., lead researcher, "National Policies Governing New Technologies of Human Genetic Modification: A Preliminary Survey," at § 3(2), available at <http://www.genetics-and-society.org/policies/survey.html> (last visited June 3, 2004).

⁶ See Ania Lichtarowicz, *Scientist Warns on Human Cloning*, *BBC News*, available at <http://news.bbc.co.uk/1/hi/world/europe/1719195.stm> (Dec. 21, 2001) (last visited on June 3, 2004) (noting that Spain and Belgium are still considering different types of legislation for adoption).

⁷ *Manipulacion Genetica y Reproduccion* [Genetic Manipulation and Reproduction]; Victoria Infertility Treatment Act, 2000; *Human Reproductive Technology Act*, 1991, § 7(1)(d)(i) (W. Austl.).

⁸ See, e.g., "The Logical Next Step? An International Perspective on the Issues of Human Cloning and Genetic Technology," 4 *ILSA J. Int'l & Comp.L.* 697, 721-25 (1998).

⁹ See, e.g., Valerie S. Rup, *Human Somatic Cell Nuclear Transfer Cloning, the Race to Regulate, and the Constitutionality of the Proposed Regulations*, 76 *U. Det. Mercy L. Rev.* 1135, 1138-39 (1999); Christine Willgoos, Note, "FDA Regulation: An Answer to the Questions of Human Cloning and Germline Gene Therapy," 27 *Am. J.L. & Med.* 101, 103 (2001).

¹⁰ *Human Fertilisation and Embryology Act*, 1990, ch. 37, Enactment Clause (Eng.). See generally Ruth Deech, "The Legal Regulation of Infertility Treatment in Britain," in *Crosscurrents: Family Law and Policy in the U.S. and England* 165-86 (Sanford Katz et al., eds, 2000).

¹¹ *Human Fertilisation and Embryology Act*, 1990, ch. 37, Enactment Clause.

¹² The Act also had a ban, predating Dolly, on the replacement of the nucleus of a human embryo cell with that of any person or embryo, but that prohibition does not cover somatic cell nucleus transfer into a human egg.

¹³ *Pro-Life Alliance v. Sec'y State for Health*, CO/4095/2000 (Q.B. 2001), available at 2001 WL 1347031.

¹⁴ *R (Quintavalle) v. Sec'y of State for Health*, 2 WLR 550 (C.A. 2002), reprinted at "Cell Nuclear Replacement Organism is "Embryo," *The Times* (London), Jan. 25, 2002.

¹⁵ *Human Reproductive Cloning Act*, 2001, U.K. Stat. 2001 ch. 23 § 1.

¹⁶ Council of Europe, *Convention for the Protection of Human Rights and Dignity of the Human with Regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine*, April 4, 1997, available at <http://conventions.coe.int/treaty/en/Treaties/Html/164.htm> The additional protocol is entitled *Additional Protocol to the Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine, on the Prohibition of Cloning Human Beings*, December 1998.

¹⁷ Council of Europe, Convention for the Protection of Human Rights and Dignity of the Human with Regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine, April 4, 1997, available at <http://conventions.coe.int/treaty/en/Treaties/Html/164.htm>

¹⁸ In resolution 56/93 of December 12, 2001, the General Assembly decided to establish an Ad Hoc Committee, open to all States Members of the United Nations or members of specialized agencies or of the International Atomic Energy Agency, to consider the elaboration of an international convention against the live-birth cloning of human beings and a mandate for the negotiations. Available at <http://www.un.org/law/cloning/index>

¹⁹ Belarus, Belgium, Brazil, China, Czech Republic, Denmark, Finland, Iceland, Japan, Liechtenstein, South Africa, Sweden, Switzerland and United Kingdom of Great Britain and Northern Ireland: draft resolution (A/C.6/58/L.8).

²⁰ Proposal by Costa Rica for a draft international convention on the prohibition of all forms of human cloning (A/58/73); Antigua and Barbuda, Benin, Costa Rica, Côte d'Ivoire, Dominica, Dominican Republic, El Salvador, Eritrea, Ethiopia, Fiji, Gambia, Georgia, Grenada, Haiti, Honduras, Italy, Kazakhstan, Kenya, Kyrgyzstan, Lesotho, Madagascar, Marshall Islands, Micronesia, Nauru, Nicaragua, Nigeria, Palau, Panama, Paraguay, Philippines, Portugal, Saint Kitts and Nevis, Saint Vincent and the Grenadines, San Marino, Sierra Leone, Spain, Suriname, Tajikistan, Timor-Leste, Uganda, United Republic of Tanzania, United States of America, Uzbekistan, Vanuatu and Zambia: draft resolution (A/C.6/58/L.2).

²¹ On November 6, 2003, the delegation of Iran, on behalf of the member States of the OIC, moved, under rule 116 of the Rules of Procedure of the General Assembly, to adjourn the debate on the agenda item until the 60th session of the General Assembly (i.e. September 2005). No action was taken on the proposals before the Committee. It should be noted that some 15 OIC states had co-sponsored the Costa Rican resolution, against one (Turkey) on the Belgian list of sponsors.