

NO WORLDWIDE CONSENSUS: THE UNITED NATIONS DECLARATION ON
HUMAN CLONING

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I. INTRODUCTION

Ever since the cloning of Dolly the sheep by Scottish scientists in 1996, nations around the world have been concerned about controlling the controversial science of human cloning.¹ With the creation of a genetically cloned animal from adult cells, the concept of human cloning went from a science fiction storyline to a potential reality. The creation of Dolly triggered a reaction of fear around the world.² Nations reacted to this fear by instituting domestic laws to regulate or ban human cloning. However, these nations realized that "[i]t is vital . . . to construct rational rules for the global conduct of genetic research, experimentation, and manipulation."³ Most countries feel that leaving regulation to independent nations is insufficient; "[s]ince alterations to the human gene pool inevitably transcend national borders, any regulation is most appropriately established on an international scale."⁴ Due to the potentially serious and life-altering ramifications of this science, the debate about how to regulate human cloning "focuses almost entirely on the concept of human rights."⁵

There are two types of cloning at issue when discussing human cloning: reproductive and therapeutic. Reproductive cloning "is a procedure used to create [a human] that has the same genetic makeup or DNA as another existing [human]."⁶ The process of reproductive cloning involves creating babies through the creation and implantation of embryos into the uterus.⁷ Reproductive cloning ultimately results in the creation of a live child.

Therapeutic cloning entails producing embryos for research with the purpose of producing human embryonic stem cells that can be extracted and

¹ About, Timeline of Cloning History, http://atheism.about.com/library/chronologies/blchron_sci_cloning.htm (last visited Oct. 16, 2006).

² Michael J. Malinowski, *The Impact of Current Policy and Regulation on Future Stem Cell Human Health Applications*, 39 NEW ENG. L. REV. 647, 653 (2005) (discussing the effect of strict policy regulations on valuable scientific research).

³ Esther Seng, *Human Cloning: Reflections on the Application of Principles of International Environmental and Health Law and Their Implications for the Development of an International Convention on Human Cloning*, 5 OR. REV. INT'L L. 114, 114 (2003) (discussing the need for international regulations on research involving human cloning).

⁴ *Id.* at 115.

⁵ *Id.* at 116-17.

⁶ Melissa S. Burchell, Note, *America's Struggle to Develop a Consistent Legal Approach to Controversial Human Embryonic Stem Cell Research and Therapeutic Cloning: Are the Politics Getting in the Way of Hope?*, 32 SYRACUSE J. INT'L L. & COM. 133, 143 (2004).

⁷ *Id.* at 146.

used to develop treatments for various human disorders and diseases.⁸ Therapeutic cloning uses human somatic-cell nuclear transfer, a process in which the nucleus of a human somatic cell is transferred “into an oocyte from which the nucleus has been removed or rendered inert.”⁹ After nucleus transfer, the cell divides to form an embryo.¹⁰ “Once cloned embryos have reached the blastocyst stage (approximately 5 days after fertilization), the inner cell mass, from which stem cell lines are derived, is removed; in the process, the embryo is destroyed.”¹¹ The stem cells have the ability to develop into any organ or tissue. If the stem cells were derived from embryos cloned from the patient needing a transplant, the cloning process could result in fewer rejection problems, since the DNA in the cloned cells would be nearly identical to the patient’s.¹² This cloning process is distinguishable from in vitro fertilization; both processes result in the production of an embryo that can be utilized in research, but in vitro fertilization involves the use of an egg and sperm to create an embryo.¹³

Scientists in support of therapeutic cloning contend that it provides the opportunity to study “genetic changes in cells derived from patients suffering from such diseases as Parkinson’s disease, Alzheimer’s disease, and diabetes.”¹⁴ These scientists “believe that embryonic stem cells will be used to assist drug development and evaluation, for diagnostic purposes, and to create cells and tissues for transplantation.”¹⁵ On the other hand, “[o]pponents [of] therapeutic cloning argue that the process is morally and ethically unacceptable because it requires scientists to create an embryo and later cause the death of the embryo in the process of harvesting the stem cells.”¹⁶

Almost all nations and scientists alike currently agree that “human reproductive cloning is unethical and should be [completely] prohibited.”¹⁷

⁸ *Id.* at 146.

⁹ Mikyung Kim, *An Overview of the Regulation and Patentability of Human Cloning and Embryonic Stem Cell Research in the United States and Anti-Cloning Legislation in South Korea*, 21 SANTA CLARA COMPUTER & HIGH TECH. L.J. 645, 650 (2005).

¹⁰ World Health Organization, *A Dozen Questions (and Answers) on Human Cloning*, <http://www.who.int/ethics/topics/cloning/en/> (last visited Nov. 21, 2006).

¹¹ *Id.*

¹² *Id.*

¹³ Kim, *supra* note 9, at 650.

¹⁴ World Health Organization, *supra* note 10.

¹⁵ *Id.*

¹⁶ Nicole Trudeau, *United Nations Update*, 12 HUM. RTS. BR. 36, 36 (2005) (discussing the adoption of the UN Declaration on Human Cloning).

¹⁷ Roger Brownsword, *Stem Cells and Cloning: Where the Regulatory Consensus Fails*, 39

'Playing God' arguments serve as the basis for most ethical objections to reproductive cloning.¹⁸ However, there is little consensus about what should be done about regulating therapeutic cloning. Nations are split on whether to have a complete ban on all forms of cloning, including therapeutic, or to ban only reproductive cloning while allowing therapeutic cloning with strict regulations.¹⁹

The United Nations has attempted to alleviate the confusion with the adoption of the United Nations Declaration on Human Cloning.²⁰ The purpose of the United Nations' focus on this issue was to "develop an international framework for responsible societal governance of human genetic technology."²¹ However, the Declaration fails to implement the international framework it sought to create. The non-binding Declaration contains significant ambiguities that leave nations with few guidelines as to how to establish national legislation regarding human cloning.

The international debate concerning the extent to which we should allow human cloning is sure to continue until a binding international consensus is reached. The serious repercussions on all human life as a result of human cloning technologies make it imperative to have a binding international regulation that takes into account both the moral rights of humans and the scientific interest in improving the quality of human life. Part II of this Note explains the background of this issue. Part III discusses the implementation of domestic laws on human cloning. Part IV enumerates the details of the United Nations Declaration on Human Cloning, as well as the process by which it was adopted. Part V sets out how the nations reacted to the Declaration. Part VI asserts how the United Nations could have acted in order to provide a more definitive solution. This Note will conclude that instead of creating guidelines that clarify the issue of human cloning legislation, the United Nations Declaration creates ambiguities that leave the public vulnerable to research outside the scope of public desire, as well as inhibits valuable research that could potentially save lives.

NEW ENG. L. REV. 535, 535 (2005).

¹⁸ Burchell, *supra* note 6, at 145.

¹⁹ Brownsword, *supra* note 17, at 538–39.

²⁰ United Nations Declaration on Human Cloning, G.A. Res. 59/150, U.N. Doc. A/R/59/80 (Mar. 23, 2005).

²¹ Seng, *supra* note 3, at 116.

II. BACKGROUND

Cloning experiments are not new. Experimentation with cloning began in the 1900s by splitting an embryo in its early stages, resulting in the development of two complete larvae.²² The first successful animal cloning took place in 1952 with the cloning of frogs by using cells from a tadpole embryo.²³ A major breakthrough occurred in 1953, when the structure of the DNA was determined.²⁴ This discovery began to raise concerns over the use of this knowledge to genetically alter humans.²⁵ In the 1980s, technology advanced with the introduction of artificial twinning.²⁶ This technique involved the splitting of a single fertilized ovum into what are then considered new embryos and then implanting each into a female to be carried to term.²⁷ However, at this time the reality of human cloning still remained a distant fantasy. The year of 1978 marked the birth of the first child conceived through in vitro fertilization²⁸ and an increase in the realization that these emerging scientific technologies could be used on humans.

The possibility of human cloning became more viable in 1990 when The National Institute of Health commenced the Human Genome Project. The Project's goals were to

identify all the approximately 20,000–25,000 genes in human DNA, *determine* the sequences of the 3 billion chemical base pairs that make up human DNA, *store* this information in databases, *improve* tools for data analysis, *transfer* related technologies to the private sector, and *address* the ethical, legal, and social issues . . . that may arise from the project.²⁹

²² About, *supra* note 1.

²³ *Id.*; MSNBC, The History of Cloning, <http://msnbc.com/news/wld/health/brill/cloningtimeline.htm> (last visited Oct. 16, 2006).

²⁴ Center for Genetics and Society, History of Human Genetic and Reproductive Technologies, <http://www.genetics-and-society.org/technologies/history.html> (last visited Nov. 21, 2006).

²⁵ *Id.*

²⁶ WORLD BOOK, *Early Scientific Attempts at Cloning* (2004), available at <http://www.worldbook.com/features/cloning/html/attempts.html>.

²⁷ *Id.*

²⁸ About, *supra* note 1.

²⁹ Human Genome Project Information, About the Human Genome Project, http://www.ornl.gov/sci/techresources/Human_Genome/project/about.shtml (last visited Nov. 21, 2006) (emphasis in original).

A genome is the DNA in an organism.³⁰ The successful mapping of the human genome makes the DNA makeup of humans available and therefore makes human cloning more possible.

By 1994, experiments on human cloning were taking place and were publicly announced.³¹ A team from George Washington Medical Center took seventeen flawed human embryos, which could not have developed into fetuses under any conditions, and successfully split them in October 1994 to produce clones.³² The primary purpose of the experiment was not to create viable human clones, but instead to encourage public debate about the issue of human cloning in general.³³ These experiments were successful in creating the desired international public debate.

In 1995, the United States created the National Bioethics Advisory Committee "to provide advice and make recommendations to the National Science and Technology Council and to other appropriate government entities regarding . . . bioethical issues . . . and . . . clinical applications."³⁴ The panel, which totaled eighteen members, consisted of doctors, scientists, law professors, psychologists, and one economist.³⁵

In 1997, the European Convention on Human Rights and Biomedicine, the first international legally binding instrument in the field of biomedical ethics, was drafted.³⁶ Prepared by the Council of Europe, it was the first biomedical ethics instrument to be enacted that provided a common basis of fundamental ethical principles between different countries.³⁷ The Convention noted that: "Parties to this Convention shall protect the dignity and identity of all human beings and guarantee everyone, without discrimination, respect for their integrity and other rights and fundamental freedoms with regard to the

³⁰ Human Genome Project Information, Cloning Fact Sheet, http://www.ornl.gov/sci/techresources/Human_Genome/elsi/cloning_shtml (last visited Nov. 21, 2006).

³¹ Human Cloning, History of Embryo Cloning, http://www.religioustolerance.org/clo_intr.htm#hise (last visited Nov. 21, 2006).

³² *Id.*

³³ *Id.*

³⁴ Exec. Order No. 12,975, 60 Fed. Reg. 52,063 (Oct. 3, 1995), available at http://www.catholiceducation.org/articles/medical_ethics/me0017.html.

³⁵ National Bioethics Advisory Commission Members, <http://www.georgetown.edu/research/nrcbl/nbac/about/nbacroster.htm> (last visited Nov. 21, 2006).

³⁶ Calum MacKellar, *Unravelling the Spin: The European Convention on Human Rights and Biomedicine*, THE CENTRE FOR BIOETHICS AND PUBLIC POLICY, Summer 2005, available at <http://www.bioethics.ac.uk/issue6.shtml> (discussing the adoption of the European Convention on Human Rights and Biomedicine).

³⁷ *Id.*

application of biology and medicine.”³⁸ The Convention does not specifically mention cloning but the language can be interpreted to include it, since it calls for nations to protect the dignity and identity of humans.³⁹ Thirty-one member states ratified or agreed to ratify the Convention; five states refused to sign because “they [found] it too liberal since it gives insufficient protection to human beings”; two states, United Kingdom and Belgium, refused to sign it because they found it too restrictive.⁴⁰ Apart from formulating rules for the ratifying states, the Convention served to open debate throughout Europe about bioethical issues: “one of the goals of the Convention was to promote community dialogue on life sciences, while providing a framework of agreement on fundamental ethical matters.”⁴¹

After the 1994 experiments, public interest in human cloning subsided until February 23, 1997 when the Roslin Institute in Scotland revealed it had cloned Dolly the sheep, the first large animal cloned through somatic-cell nuclear transfer using adult DNA.⁴² Dolly’s DNA came from a single cell taken from an egg which was then fused with a mammary cell.⁴³ The fused cell developed into an embryo and was then implanted into a surrogate sheep.⁴⁴ The embryo developed into a lamb genetically identical to the donor sheep.⁴⁵ However, Dolly’s creation was not without problems, as it took more than 277 attempts before a healthy viable lamb was born.⁴⁶ The revelation of Dolly’s creation caused immediate speculation as to whether the process of somatic-cell nuclear transfer could be applied to human beings.⁴⁷ Taking notice of the possibility that this technique could be attempted on humans and could result in problems

³⁸ *Id.*

³⁹ BARTHA MARIA KNOPPERS, CLONING HUMAN BEINGS: CLONING: AN INTERNATIONAL COMPARATIVE OVERVIEW (1997), available at <http://www.georgetown.edu/research/nrcbl/nbac/pubs/cloning2/cc7.pdf>.

⁴⁰ MacKellar, *supra* note 36.

⁴¹ *Id.*

⁴² About, *supra* note 1.

⁴³ Deborah Barnes, *Research in the News: Creating a Cloned Sheep Named Dolly*, NATIONAL INSTITUTE OF SCIENCE AND HEALTH, <http://science-education.nih.gov/home2.nsf/Education+ResourcesTopicsGenetics/BC5086E34E4DBA0085256CCD006F01CB> (last visited Nov. 21, 2006) (discussing the cloning process of Dolly).

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Institute on Biotechnology and the Human Future, Human Cloning, <http://www.thehumanfuture.org/topics/humancloning/index.html> (last visited Aug. 28, 2006).

related to errors with the process, governments around the world began to consider legislation to regulate this technology.⁴⁸

On March 4, 1997, weeks after the announcement of Dolly, then-United States President Bill Clinton instituted a moratorium on federal funding for research on human cloning pending a full investigation by the National Bioethics Advisory Commission.⁴⁹ The Commission returned with a report that human cloning still involved a great deal of risk and uncertainty; it recommended a continuation on the current moratorium for use of federal funds for reproductive cloning experiments and requested that all researchers comply with the intent of the federal moratorium.⁵⁰ Based on the findings of the Commission, President Clinton proposed a bill calling for a ban on the use of human cloning to produce children for the next five years, during which time the National Bioethics Advisory Commission would undertake a study on cloning.⁵¹ A month after Clinton's proposed legislation, "[t]housands of biologists and physicians signed a voluntary five-year moratorium on human cloning in the United States."⁵² However, Clinton's proposal failed to gain Congressional sponsors and was never enacted.⁵³

The United Nations' Educational, Scientific, and Cultural Organization's (UNESCO) Universal Declaration on the Human Genome and the Protection of Human Rights was adopted on November 11, 1997.⁵⁴ The Declaration states that "[p]ractices which are contrary to human dignity, such as reproductive cloning of human beings, shall not be permitted."⁵⁵ UNESCO's Universal Declaration on the Human Genome and the Protection of Human Rights explicitly bans reproductive cloning but leaves open the possibility of an allowance for therapeutic cloning, so long as it is within the bounds of

⁴⁸ *Id.*

⁴⁹ NATIONAL BIOETHICS ADVISORY COMMISSION, CLONING HUMAN BEINGS (1997), available at <http://georgetown.edu/research/nrcbl/nbac/pubs/cloning1/cloning.pdf>.

⁵⁰ *Id.* at 108-09.

⁵¹ Meredith Wadman, *White House Would Ban Human Cloning*, NATURE, June 12, 1997, at 644.

⁵² About, *supra* note 1.

⁵³ Center for Genetics and Society, *supra* note 24 (providing Congressional activities relating to human cloning regulation in the United States).

⁵⁴ Federico Mayor, *The Universal Declaration on the Human Genome and Human Rights*, UNESCO, Dec. 3, 1997, http://portal.unesco.org/shs/en/ev.php-URL_ID=2228&URL_DO=DO_TOPIC&URL_SECTION=201.html.

⁵⁵ UNESCO, *Universal Declaration on the Human Genome and Human Rights* (Nov. 11, 1997), available at http://portal.unesco.org/en/ev.php-URL_ID=13177&URL_DO=DO_TOPIC&URL_SECTION=201.html.

human dignity.⁵⁶ The Director General of UNESCO, Federico Mayor, believes that the importance of the text “resides in the balance it strikes between safeguarding respect for human rights and fundamental freedoms and the need to ensure freedom of research.”⁵⁷ Individual states are left to put the Declaration into practice through the legislation they adopt.⁵⁸ Thus, the survival of the principles illustrated in the Declaration relies on national implementation and is not binding on any of the states.

In January of 1998, Richard Seed, a physicist and fertility research scientist, announced his intention to begin the process of cloning the first human being and to eventually open a human cloning clinic.⁵⁹ Seed stated that if he was not allowed to do his research within the United States, he would simply move his experiments to another country where his research would be allowed.⁶⁰ Seed illustrates the mobility of scientific research and the lack of a single nation’s ability to control human cloning research outside its borders.

Later that year, nineteen members of the Council of Europe signed a protocol to the European Convention on Human Rights and Biomedicine “that would commit their countries to ban by law ‘any intervention seeking to create human beings genetically identical to another human being, whether living or dead.’”⁶¹ This protocol, however, did not address cloning for therapeutic purposes.⁶² Neither Britain nor Germany signed the protocol but for different reasons.⁶³ Germany refused to sign the measure because it was weaker than the current German law that forbids all forms of research on human embryos.⁶⁴ These strict German rules were in place as a reaction to the genetic engineering experiments previously done by the Nazis.⁶⁵ Britain declined to sign the protocol because of its “strong tradition of defending the freedoms of scientific research.”⁶⁶

⁵⁶ *Id.*

⁵⁷ Mayor, *supra* note 54.

⁵⁸ *Id.*

⁵⁹ CNN, *Opposition to Human Cloning Will ‘Blow Over,’ Scientist Says*, Jan. 7, 1998, <http://www.cnn.com/TECH/9801/07/cloning.folo/>.

⁶⁰ *Id.*

⁶¹ CNN, *19 European Nations Sign Ban on Human Cloning*, Jan. 12, 1998, <http://www.cnn.com/WORLD/9801/12/cloning.ban/>.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

The United States Senate also felt the need to implement federal regulations on cloning research. Republican and Democratic Senators each proposed legislation seeking to regulate human cloning research.⁶⁷ The Democratic bill, "supported by the biotechnology industry and biomedical research community," called for a ban on reproductive cloning.⁶⁸ The Republican bill went further and banned both reproductive and therapeutic cloning, with support from anti-abortion groups and religious conservatives.⁶⁹ Neither bill gained majority support, and both failed to be enacted.⁷⁰

"In November 2001, scientists from Advanced Cell Technologies (ACT), a biotechnology company" based in the United States, announced "that they had cloned the first human embryos for the purpose of advancing therapeutic research."⁷¹ Their research involved the collection of eggs from women's ovaries and the subsequent removal of the genetic material from these eggs.⁷² Then, a "skin cell was inserted inside the enucleated egg to serve as a new nucleus."⁷³ A chemical stimulant was then added to the egg to cause it to start to divide.⁷⁴ The success of the experiments was limited, with only three of eight eggs beginning the division process.⁷⁵

Subsequent to ACT's experiments, President George W. Bush created the President's Council on Bioethics.⁷⁶ The Council's objectives were to "monitor stem cell research, to recommend appropriate guidelines and regulations, and to consider all of the medical and ethical ramifications of biomedical innovation."⁷⁷ The Council's first topic of discussion was human cloning.⁷⁸

⁶⁷ Center for Genetics and Society, Federal Policies on Cloning, <http://www.genetics-and-society.org/policies/us/cloning.html> (last visited Oct. 16, 2006).

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ Human Genome Project Information, *supra* note 30.

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ Adrienne N. Calhoun Cash, *Invasion of the Clones: Animal Cloning and the Potential Implications on the Future of Human Cloning and Cloning Legislation in the United States, the United Kingdom, and Internationally*, 82 U. DET. MERCY L. REV. 349, 367 (2005).

⁷⁷ Jessica J. Monachello, Comment, *The Cloning for Biomedical Research Debate: Do the Promises of Medical Advances Outweigh the Ethical Concerns?*, 10 TULSA J. COMP. & INT'L L. 591, 599 (2003) (quoting President George W. Bush, Address to the Nation on Stem Cell Research (Aug. 9, 2001), available at <http://www.whitehouse.gov/news/releases/2001/08/print/20010809-2.html>).

⁷⁸ Cash, *supra* note 76, at 367.

After reviewing the history and ethical concerns of cloning, the Council drafted a report, entitled "Human Cloning and Human Dignity: An Ethical Inquiry," in which members recommended a ban on reproductive cloning and a four-year moratorium on therapeutic cloning.⁷⁹ However, the minority opinion of the Council recommended that therapeutic cloning research be allowed with strict regulation.⁸⁰

Breaking new ground, in 2001, the United Kingdom created legislation allowing researchers to legally create human embryonic clones for the purposes of therapeutic research.⁸¹ The law requires that the cloned embryos be destroyed after fourteen days, so as to avoid the potential for the embryos to develop into a human life.⁸² This law was the first in the world to explicitly allow for the creation of human embryonic clones, since all previous legislation had either prohibited or not specifically mentioned this process.

In 2003, University of Wisconsin-Madison scientists genetically modified human stem cells.⁸³ "Scientists manipulate[d] genes through electroporation—giving an electric shock to a cell, which makes small holes in its membrane so new DNA can be taken in."⁸⁴ This process allows scientists to knock out or knock in a gene that causes a disease or that controls useful functions of the body.⁸⁵

In 2004, a South Korean team of scientists lead by Hwang Woo-suk made a landmark announcement that it had cloned a human embryo and extracted embryonic stem cells from it.⁸⁶ Additionally, in 2005, Hwang reported that his team had created eleven stem cell lines genetically tailored to patients.⁸⁷ These reports gave hope that therapeutic cloning techniques could be successful. However, in January 2006 an investigatory panel released a report that the results of Hwang's experiments had been fabricated.⁸⁸ In July 2006, Hwang

⁷⁹ Monachello, *supra* note 77, at 599–600.

⁸⁰ *Id.*

⁸¹ MSNBC, *supra* note 23.

⁸² *Id.*

⁸³ Marilyn Marchione, *Scientists Swap Genes in Human Stem Cells*, MILWAUKEE J. SENTINEL, Feb. 10, 2003, at 1B, available at http://www.genetics-and-society.org/resources/items/20030210_ap.html.

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ CNN, *Stem Cell Fakery Called 'Criminal Act in Academia'*, Jan. 11, 2006, <http://www.cnn.com/2006/EDUCATION/01/11/skorea.stemcell.ap/index.html> [hereinafter CNN, *Stem Cell Fakery*].

⁸⁷ *Id.*

⁸⁸ *Id.*

admitted to telling his researchers to falsify data to make it appear as if their results were based on eleven cloned embryonic stem cell lines, rather than the two original lines they were actually working with.⁸⁹

Human cloning is an evolving science that captures the world's attention due to the serious moral, ethical, and legal implications it involves. With the increasing advancements in human cloning technologies, the laws of nations have also had to evolve. Laws that were applicable and relevant several years ago can be obsolete in the present. Cloning regulation laws need to reflect the current technologies as well as look forward to potential techniques that could be available in the near future.

III. CURRENT DOMESTIC LAWS ON HUMAN CLONING

With the comprehension that human cloning was a realistic possibility, nations rushed to implement domestic laws regulating human cloning.⁹⁰ The evolution of those laws is illustrated above. However, many nations have failed to enact any legislation regulating human cloning.⁹¹ The laws that have developed over time throughout the world differ and often contradict each other. Evidence of this inconsistency can be seen in that

around the world, . . . a patchwork of regulatory provisions is to be found. In some jurisdictions, there are outright prohibitions; in others, the position is permissive but heavily qualified . . . in others, the regulation is relatively liberal . . . and, in yet others, we find a form of regulatory schizophrenia with prohibition co-existing with permission.⁹²

According to a report in which thirty nations were studied, seventeen countries explicitly prohibit therapeutic cloning while thirteen others permit it either expressly or silently.⁹³

⁸⁹ Steven Ertelt, *Hwang Woo-Suk Admits to Falsifying Embryonic Stem Cell Research*, LIFE NEWS.COM, July 4, 2006, <http://www.lifenews.com/bio1591.html>.

⁹⁰ Adam Gusman, *An Appropriate Legislative Response to Cloning for Biomedical Research: The Case Against a Criminal Ban*, 14 ANNALS HEALTH L. 361, 361 (2005).

⁹¹ Shaun D. Pattinson & Timothy Caulfield, *Variations and Voids: The Regulation of Human Cloning Around the World*, BMC MEDICAL ETHICS, Dec. 13, 2004, available at <http://www.biomedcentral.com/1472-6939/5/9>.

⁹² Brownsword, *supra* note 17, at 539.

⁹³ Pattinson & Caulfield, *supra* note 91.

The divergence within the European Union provides an example of the conflicting domestic laws between nations. Among European Union members, twelve countries explicitly prohibit both reproductive and therapeutic cloning; four explicitly allow therapeutic cloning but ban reproductive cloning; one country implicitly bans therapeutic cloning while explicitly banning reproductive cloning; and two countries do not explicitly prohibit therapeutic cloning but do ban reproductive cloning.⁹⁴

Since the laws regulating human cloning are so diverse, many people fear the result will be little actual regulation. This lack of consistent regulation leaves the scientists unsure about which procedures they are actually allowed to perform as well as where the future of this science is headed. It has been observed that “[l]aws are evolving, and regulatory structures are mutually inconsistent. Legal and regulatory intuitions honed in one subject area are unreliable guides in others.”⁹⁵

The United Kingdom is the primary example of a nation supporting a more expansive allowance for cloning that would include therapeutic cloning.⁹⁶ “The U.K. has decided the potential benefits that will result from human embryonic stem cell research outweigh the ethical problems.”⁹⁷ In 2004, the United Kingdom provided researchers with a license to create human embryonic clones for the purposes of research.⁹⁸ To help aid in the research developments, the United Kingdom funds the creation of embryos for research purposes.⁹⁹

Nevertheless, United Kingdom researchers are not allowed to engage in this practice without abiding by strict rules and regulations.¹⁰⁰ The Human Fertilization and Embryonic Authority oversees all of the work in this area.¹⁰¹ The Authority is made up of both scientists and ethicists that offer clear regulations and guidance that must be followed for research to be deemed “ethically proper.”¹⁰² By passing national laws, the government is able to

⁹⁴ KATHRYN WHEAT & KIRSTIN MATTHEWS, WORLD HUMAN CLONING POLICIES, <http://www.ruf.rice.edu/~neal/stemcell/World.pdf> (last visited Oct. 12, 2006).

⁹⁵ Patrick L. Taylor, *Closing the Ethics Gap: Coordinating Review of Legal, Ethical and Scientific Issues in Human Embryonic Stem Cell Research*, 17 NO. 2 HEALTH LAW. 1, 5 (2005).

⁹⁶ Trudeau, *supra* note 16.

⁹⁷ Burchell, *supra* note 6, at 133.

⁹⁸ George Kanellopoulos, *Embryonic Stem Cell Research: A Comparative Study of the Philosophies of the United States and the United Kingdom*, 4 J. INT'L BUS. & L. 170, 170 (2005).

⁹⁹ Taylor, *supra* note 95.

¹⁰⁰ Kanellopoulos, *supra* note 98, at 170.

¹⁰¹ *Id.*

¹⁰² *Id.*

supervise the research being done and prevent unregulated and potentially unethical research that is contrary to the public's view of decency from occurring.

South Korea is another country that allows research on cloned embryos. The National Assembly of South Korea passed the Bioethics and Biosafety Act on December 29, 2003, which strictly banned human reproductive cloning and experiments, but permitted therapeutic cloning in limited cases for the cure of otherwise untreatable diseases.¹⁰³ Human embryos may not be created for any purpose other than pregnancy, but the excess embryos may be used for research in the limited areas.¹⁰⁴ The Act called for the establishment of two different review institutions. The first is the National Bioethics Review Committee, which is under the control of the President and responsible for reviewing national policy regarding bioethics and safety and all matters of research utilizing excess embryos or employing somatic cell nuclear transfer.¹⁰⁵ The National Bioethics Review Committee has the power to say when embryonic cloning using somatic cell nuclear transfer may be used in addition to other regulatory functions.¹⁰⁶ The other review institution, the Institutional Bioethics Review Board, reviews the ethical and scientific validity of biotechnology research proposals.¹⁰⁷

South Korea caused global controversy in 2004 when it released news that scientist Hwang Woo-suk obtained embryonic stem cells from cloned human embryos.¹⁰⁸ This research was possible within the boundaries of the laws of South Korea. However, South Korea caused an even larger international uproar in January 2006, upon the release of reports that investigations had revealed that Hwang's research had been fabricated.¹⁰⁹ The fact that there was an ethics committee in place to check the accuracy of the research illustrates the importance of strict regulatory laws and review boards.

Singapore has chosen to continue research on embryonic stem cells, "[i]n a desire to benefit from the scientific advances both socially and economically," based upon the findings in a report by the Bioethics Advisory Committee.¹¹⁰ The Committee will allow for the use of therapeutic cloning to

¹⁰³ Kim, *supra* note 9, at 680–81.

¹⁰⁴ *Id.* at 689.

¹⁰⁵ *Id.* at 687.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 688.

¹⁰⁸ CNN, *Stem Cell Fakery*, *supra* note 86.

¹⁰⁹ *Id.*

¹¹⁰ Monachello, *supra* note 77, at 616.

create human embryos specifically for research, but only after existing embryos have been utilized and permission has been granted by meeting stringent conditions.¹¹¹ The chairman of Singapore's International Advisory Council stated that "having clear guidelines and government funding will not only help calm the fear of the public, but will also make sure that the research is not driven underground."¹¹² Following the support of the government, companies in Singapore are now planning advances in stem cell research, and one such company, ES Cell International, hopes to be one of the first companies in the world to market cloned embryonic stem cells for research.¹¹³ ES Cell International noted that it "hopes that its plan will not only give scientists new cell lines to use in developing treatments in the world but will also foster an increased pace of research in cloning for biomedical research."¹¹⁴

Furthermore, Israel bans reproductive cloning while permitting therapeutic cloning.¹¹⁵ These laws are likely influenced by the Jewish faith's view on cloning. The Jewish religion takes the position that "cloning humans could conceivably be justified in some circumstances, however few they may be."¹¹⁶ The Jewish faith's view "is largely based on historical tradition and writings that focus on human destiny."¹¹⁷

Further examples exist of nations choosing to allow therapeutic cloning.¹¹⁸ Belgium, another member of the European Union, has also enacted legislation to allow for the creation of cloned embryos for research.¹¹⁹ Additionally, China issued Ministerial Regulations in 2003 which allowed cloning research for therapeutic purposes.¹²⁰ Moreover, in 2001, Japan's government approved guidelines to allow cloning for biomedical, embryonic, and stem cell research, while also effecting a law banning reproductive cloning.¹²¹

Some countries have not made firm decisions regarding the allowance of therapeutic cloning. For example, the Netherlands passed the Embryo Act in

¹¹¹ *Id.* at 618.

¹¹² *Id.* at 620.

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ WHEAT & MATTHEWS, *supra* note 94, at 8.

¹¹⁶ Institute on Biotechnology and the Human Future, Religious Viewpoints on Cloning, http://www.thehumanfuture.org/topics/humancloning/impact_religious.html (last visited Aug. 28, 2006).

¹¹⁷ *Id.*

¹¹⁸ See generally WHEAT & MATTHEWS, *supra* note 94.

¹¹⁹ Pattinson & Caulfield, *supra* note 91.

¹²⁰ *Id.*

¹²¹ Monachello, *supra* note 77.

2002, which prohibits reproductive cloning and places a five-year moratorium on therapeutic cloning.¹²² The Embryo Act considers whether the scope should be expanded to include creating embryos specifically for research purposes and allows for a second phase five years after enactment, at which time a decision will be made as to whether the ban should be lifted to allow for the creation of embryos for research purposes.¹²³ Even if the decision is made to allow for therapeutic cloning, creation of embryos will only be allowed subject to very strict conditions.¹²⁴

Many nations are currently opposed to allowing therapeutic cloning, and have passed laws prohibiting it.¹²⁵ Costa Rica, a strong proponent of international anti-cloning regulation, has domestically banned therapeutic cloning and all embryonic stem cell research.

Furthermore, France's government has publicly opposed human cloning based upon ethical concerns and scientific doubt, and due to these beliefs, the government has imposed strict bans against it.¹²⁶ A bioethics law passed in 2004 prohibits both reproductive and therapeutic cloning, imposing harsh sanctions for both and calling reproductive cloning "a crime against the species."¹²⁷ The law imposes a maximum sentence of thirty years in prison along with a fine of 7.5 million euros for reproductive cloning, while therapeutic cloning carries a maximum prison sentence of seven years and a fine of 100,000 euros.¹²⁸ The severe penalties France imposes for violations of the law indicate its strong stance towards a total ban on human cloning.

In addition, Australia has passed several laws to prevent both types of cloning. In 2000, the Commonwealth Gene Technology Act was passed which "prohibits the cloning of whole human beings," a ban on reproductive cloning only.¹²⁹ Legislation went further, however, with the Prohibition of Human Cloning Act of 2002, which prohibits both "reproductive and [therapeutic cloning] by both [somatic cell nuclear transfer] and embryo splitting

¹²² Pattinson & Caulfield, *supra* note 91.

¹²³ Ministry of Health, Welfare and Sport, Embryo Act, Oct. 24, 2005, <http://www.minvws.nl/en/folders/ibe/2002/introduction-embryo-act.asp>.

¹²⁴ *Id.*

¹²⁵ WHEAT & MATTHEWS, *supra* note 94.

¹²⁶ British Embassy, France, France Adopts New Bioethics Legislation (July 2004), *available at* <http://www.britishembassy.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1101389956890>.

¹²⁷ Jane Burgermeister, *France to OK Therapeutic Cloning?*, SCIENTIST, July 13, 2005, *available at* <http://www.the-scientist.com/news/20050713/01>.

¹²⁸ British Embassy, *supra* note 126.

¹²⁹ BioFacts, *Cloning*, BIOTECHNOLOGY AUSTRALIA FACTSHEET NUMBER 25, Nov. 2004.

methods.”¹³⁰ The purpose of the Act was to “concentrate on the ethical concerns surrounding cloning.”¹³¹ The Act makes it an offense to “create an embryo for research; engage in trade of human eggs, sperm or embryos, . . . and create embryonic stem cell lines from somatic cell donors.”¹³² Australia will, however, allow for “70,000 frozen embryos . . . created for in vitro fertilization [to] be used for stem cell research.”¹³³ In order to create consistent national regulation, the State and Territory governments are introducing complementary legislation to the Act.¹³⁴

Despite these regulations prohibiting the creation of embryos using therapeutic cloning, the Center for Stem Cells and Tissue Repair opened in Melbourne.¹³⁵ Scientists who will be involved with the Center believe Australia will be one of the leaders in stem cell research.¹³⁶ This view of successful stem cell research absent the use of therapeutic cloning technologies conflicts with those nations supporting therapeutic cloning, since their basis for permitting therapeutic cloning is that research would be ineffective or impossible without it.

Not surprisingly, the Vatican is opposed to both reproductive and therapeutic cloning. The nation’s view is based on the official opinion of the Roman Catholic Church, which is that “every possible act of cloning humans is intrinsically evil” and could never be justified.¹³⁷ Its religious and ethical traditions, largely based on its interpretation of the creation story from the Bible, provide this viewpoint on cloning.¹³⁸ However, it is somewhat surprising that the Vatican’s United Nations representative characterized therapeutic cloning as worse than reproductive cloning since it results in the creation of embryos specifically for the purpose of being destroyed.¹³⁹ Since the Vatican views all embryos as human lives, it believes therapeutic cloning results in the destruction of human lives.¹⁴⁰ While the Vatican is not a nation

¹³⁰ *Id.*

¹³¹ Monachello, *supra* note 77, at 613.

¹³² *Id.* at 616.

¹³³ *Id.* at 615–16.

¹³⁴ *Id.* at 615.

¹³⁵ *Id.* at 616.

¹³⁶ *Id.*

¹³⁷ Institute on Biotechnology and the Human Future, *supra* note 116.

¹³⁸ *Id.*

¹³⁹ LifeSite, *Vatican Tells United Nations ‘Therapeutic’ Cloning is Worse than Reproductive Cloning*, Nov. 20, 2002, <http://www.lifesite.net/ldn/2002/nov/02112002.html>.

¹⁴⁰ *Id.*

likely to directly affect the research arena, its views are still a matter of contention for United Nations decisions.

The United States is unique in that federal government actions restrict cloning research, yet states ultimately determine whether to allow the technology since the government has failed to adopt laws explicitly regulating the research. The United States' federal government has taken great lengths to restrict scientific research in the field of therapeutic cloning, believing that all human cloning should be banned regardless of its purpose.¹⁴¹

Despite its failure to enact federal anti-cloning legislation, the federal government of the United States is reluctant to advance into this scientific field given its disallowance of federal research programs to experiment with therapeutic cloning, in addition to its restrictions on stem cell research not involving cloning.¹⁴² President George W. Bush's administration instated a policy that restricted the use of federal funds for human embryonic stem cell research to only research involving the sixty-four stem cell lines already in existence.¹⁴³ The allowance for use of the existing stem cell lines was based on the notion that those embryos "had been destroyed previously and cannot develop into human beings."¹⁴⁴ The policy clearly states that no federal funds will support "the derivation or use of stem cell lines derived from newly destroyed embryos, the creation of any human embryos for research purposes, or cloning of human embryos for any purposes."¹⁴⁵ The National Institute of Health noted that scientists were already facing hardships, such as supply and patent problems, due to the standards set by the President.¹⁴⁶ President Bush kept the tight restrictions on federal funding in July 2006, when he used his veto power for the first time to strike down a measure that would have allowed couples to donate to researchers embryos frozen for fertility treatments.¹⁴⁷ By these limitations, the United States' government has expressed its desire to protect the interest of potential human life over the ability to find possible cures for diseases.¹⁴⁸

¹⁴¹ Kanellopoulos, *supra* note 98, at 179.

¹⁴² *Id.* at 171.

¹⁴³ *Id.* at 180.

¹⁴⁴ *Id.*

¹⁴⁵ *Id.* at 181.

¹⁴⁶ Monachello, *supra* note 77, at 597.

¹⁴⁷ CNN, *Bush Vetoes Embryonic Stem Cell Bill*, July 20, 2006, <http://www.cnn.com/2006/POLITICS/07/19/stemcells.veto/index.html>.

¹⁴⁸ Kanellopoulos, *supra* note 98, at 179–80.

However, the United States does ultimately leave individual states with the power to legislate whether to allow therapeutic cloning and state funding for research within their borders.¹⁴⁹ The federal government has, for the most part, left private research unregulated.¹⁵⁰ Only fifteen states in the United States have enacted laws pertaining to human cloning.¹⁵¹ This failure to enact legislation leaves the other thirty-five states vulnerable to potentially unethical research. In states without laws, researchers have free reign and can conduct potentially damaging research openly; whereas in regulated states, unethical research has to occur on the sly.

Absent federal regulation, the possibilities for research vary widely depending upon the state in which a scientist researches. Examples of the inconsistent laws include

[i]n Louisiana . . . research on surplus IVF embryos is forbidden, while in Illinois and Michigan research on live embryos is prohibited generally; Arkansas, Iowa . . . Michigan[,] and North Dakota ban research on cloned embryos; . . . while in South Dakota, embryo research is strictly forbidden, whatever the source. California and New Jersey stand apart from the rest, explicitly encouraging research on embryos.¹⁵²

California has actually voted to allow billions of state funds in the furtherance of embryonic stem cell research in the hopes of attracting research institutions and scientists to their state.¹⁵³ The state funding includes the allowance for the creation of new embryos. Due to the federal government leaving it to the states to decide about state funding and leaving the private sector virtually

¹⁴⁹ Monachello, *supra* note 77, at 603.

¹⁵⁰ Burchell, *supra* note 6, at 133.

¹⁵¹ National Conference of State Legislatures, State Human Cloning Laws, Apr. 18, 2006, <http://www.ncsl.org/programs/health/genetics/rt-shcl.htm> (providing table of state statutes regarding human cloning, including Arizona, Arkansas, California, Connecticut, Indiana, Iowa, Maryland, Massachusetts, Michigan, Missouri, New Jersey, North Dakota, Rhode Island, South Dakota, and Virginia).

¹⁵² Julian Hitchcock, *The Embryonic Stem Cell Business*, MILLS & REEVE, Apr. 18, 2005, available at http://www.cambridgenetwork.co.uk/POOLED/ARTICLES/BF_NEWSART/VIEW.ASP?Q=BF_NEWSART_152330 (discussing the irregularities in human cloning regulation and the financial implications of those places with more liberal regulations).

¹⁵³ Kanellopoulos, *supra* note 98, at 185.

unregulated, the United States is creating inconsistencies and the risk that scientists may go beyond what the public is willing to tolerate.¹⁵⁴

Due to these inconsistencies with regulations between and within nations, "the international community recognized that the regulation of human cloning should include the global level, because domestic efforts are not satisfactory due to the global ramifications of human cloning."¹⁵⁵ Actions through the United Nations are one of the routes by which to impose international regulations. The United Nations first attempted to resolve moral and ethical issues raised by new scientific technologies by adopting the Universal Declaration on the Human Genome and Human Rights in 1997.¹⁵⁶ This Declaration sought to strike a balance "between safeguarding respect for human rights and fundamental freedoms and the need to ensure freedom of research."¹⁵⁷ Furthermore, "[i]n November 2001, the United Nations General Assembly adopted a resolution establishing a committee to draft an international treaty on human cloning."¹⁵⁸ The current Declaration stems from this committee.

IV. ADOPTION OF THE UNITED NATIONS DECLARATION ON HUMAN CLONING

The United Nations committee created to discuss human cloning regulation resulted in two main proposals for an international resolution being brought before the United Nations General Assembly.¹⁵⁹ The differences between the proposals lay in the scope of the ban. The Costa Rican proposal came before the United Nations in 2003, calling for the adoption of an international convention which would be a legally binding ban against all forms of human cloning.¹⁶⁰ Sixty-three countries cosponsored the Costa Rican draft.¹⁶¹ The United States lobbied hard for support of this proposal.¹⁶² Supporters of the

¹⁵⁴ Burchell, *supra* note 6, at 133.

¹⁵⁵ Seng, *supra* note 3, at 115.

¹⁵⁶ Trudeau, *supra* note 16, at 36.

¹⁵⁷ Mayor, *supra* note 54.

¹⁵⁸ Monachello, *supra* note 77, at 623.

¹⁵⁹ Trudeau, *supra* note 16, at 36.

¹⁶⁰ *Id.*

¹⁶¹ John R. Crook, *Contemporary Practice of the United States Relating to International Law: International Human Rights: Efforts to Ban Human Cloning*, 99 AM. J. INT'L L. 266, 266 (2005) (discussing attempts by the United Nations to pass international regulations on human cloning).

¹⁶² Gretchen Vogel, *International Treaties: United Nations Tackles Cloning Question --*

complete ban on all forms of cloning contend that there is no difference between reproductive and therapeutic cloning since cloning an embryo, regardless of the purpose and even if the embryo will never be born, is immoral.¹⁶³ Another theory as to why many developing nations support the Costa Rican proposal is that it encourages countries to direct funds to more pressing global issues that developing nations face, rather than to human cloning research.¹⁶⁴ The Ethiopian representative, for example, “hoped the funding for research into human cloning could be redirected towards research and development to find cures for those affected by HIV/AIDS, tuberculosis and malaria.”¹⁶⁵

The alternative proposal by Belgium called for an explicit ban on reproductive cloning, but allowed for countries to set their own rules for therapeutic cloning.¹⁶⁶ The Belgium proposal was cosponsored by more than twenty nations, including the United Kingdom.¹⁶⁷ The proposal would have allowed countries the autonomy to regulate therapeutic cloning under national law, subject it to a moratorium, or ban it completely.¹⁶⁸

Instead of the adoption of either of the specific international conventions, the Sixth Committee passed a non-binding declaration. The Committee chose to take up the issue of human cloning in the form of a declaration in an attempt to prevent a divisive vote on the question of an international convention.¹⁶⁹ The representative of Mexico noted that “those negotiating the Declaration had had to take into account uncertainty over new scientific advances, as well as its ethical, cultural and religious implications.”¹⁷⁰ This declaration was adopted in the efforts to reach a consensus on the divisive issues after years of debate.¹⁷¹ In March 2005, the General Assembly accepted the recommendation despite the inability to achieve consensus and passed the United Nations

Again, SCIENCE, Oct. 29, 2004, at 797.

¹⁶³ Trudeau, *supra* note 16, at 36.

¹⁶⁴ Vogel, *supra* note 162.

¹⁶⁵ Press Release, General Assembly, General Assembly Adopts United Nations Declaration on Human Cloning by Vote of 84-34-37, U.N. Doc. GA/10333 (Aug. 3, 2005), *available at* <http://www.un.org/News/Press/docs/2005/ga10333.doc.htm>.

¹⁶⁶ Vogel, *supra* note 162.

¹⁶⁷ *Id.*

¹⁶⁸ Crook, *supra* note 161, at 266.

¹⁶⁹ Press Release, *supra* note 165.

¹⁷⁰ *Id.*

¹⁷¹ Trudeau, *supra* note 16, at 36.

Declaration on Human Cloning by a vote of eighty-four in favor, thirty-four against, and thirty-seven abstentions.¹⁷²

The Declaration "prohibit[s] all forms of human cloning inasmuch as they are incompatible with human dignity and the protection of human life."¹⁷³ Since the Declaration is non-binding, it seeks "to protect human life in the application of life and reproductive sciences, by urging member states to adopt domestic legislation compatible with the Declaration's text."¹⁷⁴ The General Assembly adopted this Declaration while

[a]ware of the ethical concerns that certain applications of rapidly developing life sciences may raise with regard to human dignity, human rights and the fundamental freedoms of individuals, [and] [r]eaffirming that the application of life sciences should seek to offer relief from suffering and improve the health of individuals and humankind as a whole.¹⁷⁵

This language found within the declaration itself demonstrates the conflict of interest between scientific advances and human rights and dignity.

Most nations that voted against the Declaration did so because its provisions could be interpreted to call for a ban on all forms of human cloning, including therapeutic.¹⁷⁶ Those states in favor of the Declaration supported its adoption, noting that it "constituted an important step in the protection of human dignity and the promotion of human rights, as well as a stepping stone in the process towards a complete ban on human cloning."¹⁷⁷ Voting in support of the Declaration, Ethiopia's representative stated that the text "sent a clear message against unethical research, that made human life the object of experimentation."¹⁷⁸

¹⁷² Press Release, *supra* note 165 (including a list of the way the nations voted and explanations by their representatives).

¹⁷³ United Nations Declaration on Human Cloning, *supra* note 20.

¹⁷⁴ Trudeau, *supra* note 16, at 36.

¹⁷⁵ United Nations Declaration on Human Cloning, *supra* note 20.

¹⁷⁶ Press Release, *supra* note 165.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

V. NATIONS' REACTIONS TO THE DECLARATION

The adoption of the Declaration does not eliminate the questions regarding international regulations of human cloning, and in fact might add even more. "[T]he Declaration's text is ambiguous and does not explicitly state which forms of cloning States should ban."¹⁷⁹ States are now faced with the difficulty "of defining and interpreting which forms of cloning are incompatible with human dignity."¹⁸⁰ By not specifying what types of cloning are banned, the possibility remains for nations to continue to make their own decisions about what cloning practices they choose to employ. By only banning cloning that is "incompatible with human dignity," the Declaration leaves significant ambiguities. These ambiguities allow States that are supporters of therapeutic cloning to construe the statement "to mean that therapeutic cloning is compatible with human dignity and therefore not prohibited," while those States opposed to all forms of human cloning can construe it to mean that both reproductive and therapeutic cloning are banned.¹⁸¹ Thus, the Declaration is essentially powerless since it is ambiguous and nations can still choose to interpret it any way that they want, as long as they can argue research is within human dignity. The representative of the Republic of Korea, for instance, emphasized that the Declaration would allow for therapeutic cloning since it "would reaffirm human dignity by relieving pain and suffering."¹⁸²

More troublesome is the fact that the Declaration did not include an outright ban on human reproductive cloning, which could result in a nation trying to find a way to make this procedure compatible with human dignity or simply ignoring the Declaration outright since it is non-binding. As expressed by the representative of India, there is "deep regret that the Sixth Committee had been unable to recommend to the plenary a text that was acceptable to all Member States on a matter of such paramount importance as an international convention against the reproductive cloning of human beings."¹⁸³ The United Kingdom's representative noted that "the Assembly had missed an opportunity to adopt a convention prohibiting reproductive cloning because of the intransigence of those who were not prepared to recognize that other sovereign States might decide to permit strictly controlled applications of therapeutic

¹⁷⁹ Trudeau, *supra* note 16, at 36.

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² Press Release, *supra* note 165.

¹⁸³ *Id.*

cloning.”¹⁸⁴ However, some nations feel that the Declaration provided adequate guidance on the issue of a total ban for reproductive cloning. Hungary’s representative stated that the Declaration “attached the utmost importance to sending a strong message that the birth of cloned human beings was not acceptable.”¹⁸⁵

In addition to the problems created by the ambiguities, the Declaration also fails to create a consensus among the international community on the issue of human cloning. The representative of Belgium noted that “the Declaration represents the wide divergence in the international community . . . but it would serve to significantly divide States, rather than bringing them together.”¹⁸⁶ Nations are still as divided about whether to allow therapeutic cloning as they were before the Declaration was adopted. One commentator noted that the opponents of therapeutic cloning are “trying to portray this as a victory for their ideology, . . . [b]ut this confusing declaration is an effort to mask their failure last November to impose a treaty on the world banning therapeutic cloning.”¹⁸⁷

Due to the ambiguous nature of the Declaration, “it is unlikely that States will seek to adopt domestic legislation in accordance with the Declaration or attempt to interpret the Declaration’s meaning and purpose.”¹⁸⁸ States have no motivation to attempt to enact laws to be in accordance with a non-binding declaration, since there is no real way to comply with an ambiguous declaration. “Until the General Assembly can unite on a common course to pursue with regard to human cloning, the effect of the Declaration will likely be minimal.”¹⁸⁹

Some nations supporting therapeutic cloning claim their laws will remain unchanged even after the acceptance of the Declaration. The United Kingdom noted that the Declaration would not affect its stance on research.¹⁹⁰ The Health Secretary of Britain proclaimed that “[t]he U[nited] N[ations] declaration is non-binding and will make no difference whatsoever to the position of stem cell research in the U[nited] K[ingdom]; therapeutic cloning

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ Trudeau, *supra* note 16, at 43.

¹⁸⁷ *United Nations Votes Against Human Cloning*, CANADIAN CONTENT, Mar. 11, 2005, http://www.canadiancontent.net/commtr/article_752.html.

¹⁸⁸ Trudeau, *supra* note 16, at 43.

¹⁸⁹ *Id.*

¹⁹⁰ Press Release, *supra* note 165.

will continue to be allowed.”¹⁹¹ Moreover, “[h]aving voted against the Declaration, the Chinese government would continue to adhere to its position against reproductive human cloning,” while still allowing therapeutic cloning subject to strict regulations.¹⁹²

VI. IDEAL UNIVERSAL LAW ON HUMAN CLONING

The United Nations General Assembly should have held out for a binding international convention regarding human cloning rather than accepting the non-binding Declaration. As noted by French President Jacques Chirac, “[n]othing will be resolved by banning certain practices in one country if scientists and doctors can simply work on them elsewhere. It is only at the international level that we will be able to prohibit cloning and genetic manipulation that could alter the characteristics of the human race.”¹⁹³ The problems found in the current Declaration should be corrected to fix its deficiencies and to create a new resolution that better serves the purpose of the United Nations to regulate human cloning. “Before attempting to present a declaration to the world concerning a divisive issue, the text employed to call on States to adopt domestic legislation should be clear, unambiguous, and easily interpreted, as should the document’s purpose.”¹⁹⁴

Although many nations do not wish to engage in therapeutic cloning themselves, many do seem to recognize the potential importance of this technology. These benefits include the possibility of growing new organs matched to the recipient, as well as the treatment of chronic illnesses, such as Parkinson’s Disease.¹⁹⁵ Based on the serious moral and ethical concerns, the United Nations should adopt a binding resolution that prohibits all forms of reproductive cloning. The resolution should also allow for individual states to choose whether to permit therapeutic cloning based on their own evaluation of whether the medical benefit outweighs the moral and ethical concerns. The resolution should include strict guidelines about regulations and procedures for those nations choosing to allow therapeutic cloning, to ensure the experiments stay within the bounds of what is ethically acceptable. Furthermore, those

¹⁹¹ Ian Sample, *Britain to Defy UN Vote on Cloning*, GUARDIAN, Mar. 9, 2005, available at http://www.guardian.co.uk/uk_news/story/0,,1433202,00.html (discussing Great Britain’s view of the adoption of the United Nations Declaration on Human Cloning).

¹⁹² Press Release, *supra* note 165.

¹⁹³ CNN, *19 European Nations Sign Ban on Human Cloning*, *supra* note 61.

¹⁹⁴ Trudeau, *supra* note 16, at 43.

¹⁹⁵ Cash, *supra* note 76, at 356.

nations choosing to allow therapeutic cloning would need to determine the boundaries and define what is ethically acceptable.

However, if the United Nations decides that all cloning should be banned, it should draft a resolution calling for a total ban on all forms of human cloning. The resolution should explicitly prohibit both reproductive and therapeutic cloning through any means available. The resolution should also ban somatic cell nuclear transfer by including it within the definition of human therapeutic cloning, since scientists may try to distance this technique from definition of cloning.

Many national policymakers have based the need to restrict or ban both forms of cloning on the notion of "human dignity."¹⁹⁶ This term is useless, however, in providing a cohesive guideline, since the boundaries of human dignity are based on one's definition of human life, and "the definition of human life is a term that has different meaning in different religions and cultures."¹⁹⁷ This standard also provides little information about reasons and justifications for any laws or lack thereof. The resolution should include a definition for human dignity, as well as a more illustrative definition of what types of experimentation would violate or fall within the scope of human dignity.

VII. CONCLUSION

Human cloning is an international, controversial issue for which binding international regulations are needed. Reproductive cloning is a route that almost everyone in science, politics, and the general public agrees should not be taken.¹⁹⁸ The immense consequences of creating a human life that is the exact replica of another person is something that most people feel scientists have no right with which to meddle. Some of these concerns with reproductive cloning "relate to serious safety concerns, individuality, family integrity, and treatment of children as objects."¹⁹⁹ Some of these "[p]ossible harms include physical harms from the manipulation of [cells] . . . and embryos, . . . and psychological harms, such as a diminished sense of individuality and personal

¹⁹⁶ Timothy Caulfield, *Human Cloning Laws, Human Dignity and the Poverty of the Policy Making Dialogue*, BMC MEDICAL ETHICS, July 29, 2003, available at <http://www.biomedcentral.com/1472-6939/4/3> (discussing the lack of clarification of the policy choices behind current regulations).

¹⁹⁷ Trudeau, *supra* note 16, at 36.

¹⁹⁸ Brownsword, *supra* note 17.

¹⁹⁹ Kim, *supra* note 9, at 679.

autonomy.”²⁰⁰ Due to these beliefs and fears, most urge that an international ban on reproductive cloning is appropriate and necessary.²⁰¹

However, the global views about therapeutic cloning are much more controversial and varied. Nations in support of the advancement of scientific research defend a nation’s right to allow therapeutic cloning. The United Nation’s representative from Singapore noted that the adoption of a text that tries to “impose a single set of regulations on States regarding all forms of human cloning” would commandeer individual nations’ initiative of effectively regulating human cloning.²⁰² On the other hand, nations taking a moral stand on behalf of the rights of humans, including unborn embryos, encourage a total ban on human cloning, both reproductive and therapeutic.²⁰³ The Nigerian representative supported a complete ban on all forms of cloning based on the belief that “[h]uman life was sacrosanct, and there was no reason for its violation. [He found it] an inconceivable paradox that proponents of therapeutic cloning would sacrifice the life of one in order to serve another.”²⁰⁴

Moral and ethical issues collide with hopes for scientific and medical advances, making the issue highly contested and therefore harder to resolve.²⁰⁵ However, the serious potential repercussions that could result from a lack of binding regulations make the need to implement these types of laws crucial.

Current domestic laws are inconsistent and, in many cases, in direct contradiction to one another. The status of these laws leaves researchers with little guidance or regulation in regards to human cloning research. The failure to have an international regulatory system allows for researchers unhappy with the restrictions in their country to simply move to another country that has no or less strict regulations. Nations in need of the financial support that can be gained from research may be willing to ignore seriously unethical and unsafe research practices in order to persuade researchers to conduct their experiments within their borders.

Unfortunately, the United Nations Declaration on Human Cloning has failed to provide an international consensus for the regulation of human cloning. Due to the adoption of the Declaration, the United Nations will no longer formally consider the issue of human cloning regulation until a member

²⁰⁰ *Id.*

²⁰¹ Press Release, *supra* note 165.

²⁰² *Id.*

²⁰³ *Id.*

²⁰⁴ *Id.*

²⁰⁵ Seng, *supra* note 3, at 115.

state raises the issue again.²⁰⁶ If an international solution is to be reached, a nation is going to have to come up with a new proposal for the General Assembly to consider.²⁰⁷ However, it seems nations in favor of therapeutic cloning will fail to support any draft that does not explicitly allow for therapeutic cloning, due to their stance on the importance of this technology for the value of human life.

The United Nations needs to implement a binding international convention for the regulation of human cloning. Nations need to balance the interests of one another to reach a compromise so that a consensus can be reached. Human cloning has potentially serious ramifications, both positive and negative, that warrant extreme efforts to reach a consensus on binding international regulations. Nations need to make it a priority to work toward this international consensus for the regulation of human cloning.

²⁰⁶ Trudeau, *supra* note 16, at 36.

²⁰⁷ *Id.*