CLONING HUMANS: LEGAL AND ETHICAL CONSIDERATIONS

by
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I. Introduction

New York Times, March 14, 2000: “President Clinton and Prime Minister Tony Blair of Britain said... that the sequence of the human genome should be made freely available to all researchers. The statement led to a sharp sell-off in the stocks of biotechnology companies, which hope to profit by creating drugs based on genetic data.”

The charitable motives of the two world leaders notwithstanding, the dramatically negative market reaction to that announcement evidenced the public’s serious commercial interest in biotech research. While gene mapping is the latest biotech advance to receive popular attention, just three years ago sci-fi became reality when a mammal was successfully cloned using an asexual reproductive technique. The mapping of the human genome portends a future in which now common diseases may be effectively managed or eliminated, a future in which parents may be assured that their children will be born healthy. The possibility of human cloning heralds a future that some would consider miraculously wonderful and others would consider Frankensteinian. The legal and ethical considerations associated with the “new biology” represented by recent scientific advances will have to be addressed as society adjusts to what was, up to now, futuristic.

The modern era of biotechnology, and the accompanying public anxiety about the possibility of cloning humans, began on February 22, 1997, when the world learned that Ian Wilmut and his team at the Roslin Institute in Scotland had successfully cloned a sheep (named “Dolly”) by the use of a new technique known as somatic cell nuclear transfer (“SCNT”). This process is an extension of research that had been ongoing for over 40 years using nuclei derived from non-human embryonic and fetal cells. In the Dolly case, cells from an adult ewe were starved of nutrition to arrest development and to restore them to a "totipotent" state (having potential to develop in specialized ways). The nuclei of these cells were then transplanted into sheep "oocytes" (immature eggs) to which an electric current was applied. When the egg divided and became an embryo it was implanted in a surrogate mother sheep. The result was a "delayed genetic twin" of the original adult ewe from which the cells were taken.

II. Cloning of Humans Determined to be Immoral

Almost immediately after the Dolly cloning announcement, President Clinton declared that no federal moneys would be spent to fund cloning experiments involving humans. He then requested that the National Bioethics Advisory Commission (the “NBAC,” or the “Commission”) report to him within 90 days on legal and ethical issues involved in cloning techniques and “possible Federal actions to prevent its abuse.” The President requested, further, that private researchers voluntarily refrain from human cloning research, stating that “people should resist the temptation to replicate themselves.”

Its mission thus presented, the National Bioethics Advisory Commission undertook to review the scientific, religious, ethical and legal issues raised by the possibility that humans could be replicated. The result of the NBAC effort, entitled “Cloning Human Beings, Report and Recommendations of the National Bioethics Advisory Commission, Rockville, Maryland, June 1997” (the “NBAC Report” or the “Report”) was transmitted to the President under cover letter dated June 9, 1997. The NBAC Report, which is surprisingly readable for such a weighty and technical subject, concludes and recommends, inter alia, that “... at this time it is morally unacceptable for anyone in the public or private sector, whether in a research or clinical setting, to attempt to create a child using somatic cell nuclear transfer cloning.”

The finding that human cloning is “morally unacceptable” was substantially based on the belief that the SCNT technique “[a]t present... involves “unacceptable risk,” and that to attempt to create a child using the SCNT method would violate important ethical obligations due to unacceptable risks to the fetus and/or potential child.

The Commission, in its Report, made several recommendations:

A continuation of the ban on federal funding in support of any attempt to create a child by SCNT.

- An immediate request to all non-federally funded researchers to comply voluntarily with the intent of the federal ban and that professional and scientific societies should make clear that any attempt to create a child by SCNT would be an irresponsible, unethical, and unprofessional act.
- Federal legislation should be enacted to prohibit such human cloning, which legislation should be reviewed after a three to five year period.
- Any regulations or legislation should be carefully written so as not to interfere with other important areas of scientific research.
- If a legislative ban is not enacted, or if a legislative ban is ever lifted, clinical use of SCNT techniques should be preceded by research trials that are governed by independent review and informed consent.
- The U.S. government should cooperate with other nations and
international organizations to enforce any common aspects of their policies. 25

- Different ethical and religious perspectives and traditions are divided on many of the important moral issues that surround any attempt to create a child using SCNT techniques. Therefore, the federal government and all interested parties should encourage widespread and continuing deliberation of these issues in order to further understand the ethical and social implications of this technology and to enable society to produce appropriate long-term policies. 26

- Because scientific knowledge is essential for all citizens to participate in a full and informed fashion in governance, federal departments and agencies concerned with science should cooperate in seeking out and supporting opportunities to provide information and education to the public in the area of genetics, and on other developments in the biomedical sciences, especially where these affect important cultural practices, values and beliefs. 27

In the year 2000, we probably lack the perspective to appreciate the enormity of the significance of the discovery of the ability to clone mammals. But the immediate reaction to the possibility of human cloning was neither subtle nor positive. Polls of public opinion evidenced widespread disapproval of the idea of cloning humans. 28 Worldwide health organizations expressed their opposition to the concept. 29 Countries considered or enacted laws prohibiting cloning of humans. 30 Religious groups viewed the cloning of humans as a prohibited encroachment on the powers of the creator. 31 In anticipation of and in reaction to the NBAC report, no fewer than ten bills with the apparently main purpose of prohibiting the cloning of humans have been introduced in Congress. 32

III. The Human Genome Project

A decade before the cloning of Dolly another groundbreaking biotech undertaking was beginning. In 1990, a consortium including the U.S. Department of Energy and the National Institute of Health formed the Human Genome Project. 33 This public endeavor, funded by the U.S. Government (two-thirds) and a British charity, the Wellcome Trust (one-third), had the following projected goals: identify all the approximately 100,000 genes in the human DNA, determine the sequence of the 3 billion chemical bases that make up human DNA, store this information in databases, develop tools for data analysis, and address the ethical, legal and social issues that may arise from the project. 34 Originally planned to span a period of 15 years, rapid progress has resulted in the projected completion date being moved forward to 2003. 35 The Human Genome Project, as a public effort, posts its results daily on its web site. 36

In true entrepreneurial spirit, several private companies including Celera 37 of Rockville, Maryland, have challenged not only the methodology of the Human Genome Project but also the ownership of the intellectual property discovered in connection with the search to map the human genome. 38 The strategy of the private genome research companies is to focus on the genes themselves and to obtain patents on as many as possible. 39 On April 7, 2000, Celera 40 announced that it had completed sequencing the genes of one person (and the stock market rallied). 41

The relatively contemporaneous phenomena of cloning mammals and sequencing of the human gene have brought mankind to nothing less than the threshold of a new era in science. Biology is now poised to become a major influence on the next step in the evolution of law. At the cusp of the new era, the U.S. government has put the brakes on cloning research while private industry has pushed the accelerator on human genomic research.

IV. Is There a Legal Right to Clone Humans?

It is not difficult to imagine societal benefits of plant cloning (to produce greater crop yield, healthier, more beneficial foods) or even animal cloning (increased food supply, healthier food, better lab animals, a source of organs or parts for humans). When it comes to human cloning, the perceived benefits are more difficult to evaluate and thus the need to do so more serious.

Perhaps the purest, albeit amoral, argument supporting the eventual cloning of humans is that, presumably, we will be able to clone. There is a certain intellectual repugnance to the current official U.S. position that such scientific inquiry should simply stop. Surely there will be a maverick scientist that will proceed with human cloning for fame or profit regardless of any official proscription. 39 One must wonder if it would not have been more prudent (and scientifically productive) for our government to attempt to regulate, rather than ban research in the field of human cloning.

Proponents of human cloning offer several potential benefits for the process including its use as a treatment for infertility, a source of organ or tissue, 42 replicating a person, or replacing a dead person. Opponents of human cloning raise a variety of objections from those based in moral, ethical and religious grounds 43 to those based on horrific fantasies to the effect that legions of soldiers, slaves or superhumans will be created. 43 Eventually the law will be called upon to determine if there is a right to clone humans.

Those in favor of cloning humans tend to categorize such cloning as merely another method of technology-assisted reproduction. This argument may be a gross oversimplification by ignoring the vast difference between cloning and other reproductive techniques. Current reproduction technologies, which are widely accepted, include artificial insemination, in vitro fertilization, traditional surrogacy (in which a female is artificially inseminated by a male to whom she surrenders the child), non-traditional surrogacy (in which the female is impregnated by a male to whom she surrenders the child), and sex-selection techniques (pre-fertilization, pre-implantation, post-implantation). 44 If human cloning is accepted by society as just another form of assisted reproduction one can look to the established law concerning reproductive freedom for guidance.
Case law offers no definitive holding as to the extent of individual freedom to, or the right of the government to interfere with, asexual reproduction. The Supreme Court of the United States has interpreted the Fourteenth Amendment's due process guarantee of "liberty" to include a right to privacy that includes individual autonomy and "fundamental values" that have been protected by the Supreme Court in the areas of privacy, autonomy and family values.

*Washington v. Glucksberg,* a 1997 Supreme Court case, involved a state statute providing that a person who knowingly causes or aids another person to attempt suicide is guilty of a felony. The plaintiffs, consisting of doctors who treated terminally ill patients and individuals who were terminally ill, argued that the existence of a liberty interest protected by the Fourteenth Amendment extended to the personal choice to commit physician-assisted suicide. While finding that the right to commit suicide was not a fundamental liberty protected by the due process clause, the Court did state:

"...in addition to the specific freedoms protected by the Bill of Rights, the "liberty" specifically protected by the Due Process Clause includes the right to marry..."...to have children..."...to direct the education and upbringing of one of his children..."...to marital privacy..."...to use contraception..."...to bodily integrity..."...and to abortion..."...

One of the cases cited by the Supreme Court in *Washington v. Glucksberg* was *Skinner v. Oklahoma.* In that case the Supreme Court reviewed the right of the State of Oklahoma to sterilize habitual criminals. The Court held "we are dealing with legislation that involves the basic civil rights of man. Marriage and procreation are fundamental to the very existence and survival of the race." On the one hand, the government's authority to interfere with procreative liberty has been limited by the Fourteenth Amendment "liberty" guarantee, but, on the other, there is a reluctance to elevate personal autonomy to the level required to allow a substantive due process challenge.

*Bowers v. Hartwich* examined a Georgia statute that made it a criminal offense to commit sodomy. The Supreme Court rejected a challenge to that law based on the assertion of a constitutional right to personal autonomy.

In limiting its view of the scope of Constitutional rights, the Court held: 
"...we [are not] inclined to take a more expansive view of our authority to discover new fundamental rights embedded in the Due Process Clause. The Court is most vulnerable and comes nearest to illegitimacy when it deals with judge-made constitutional law having little or no cognizable roots in the language of the Constitution.

Where, exactly, human cloning will fall in the spectrum of guaranteed liberties has yet to be decided. Existing case law would seem to reject cloning as a fundamental liberty entitled to Constitutional protection. As the debate over cloning continues, the perception of the process as an ungodly exercise of human power or as merely an extension of technology-assisted reproduction may affect the legal rights attached to the concept.

V. Conclusion

The absence of any Constitutional foundation that can secure anchor procreative liberty seems, for the present time, to leave the assertion of the right to clone humans, in an unsettled and probably tenous state.

Based on its belief that cloning humans by the SCNT technique was not safe, the NBAC made it clear that such cloning is not only considered "morally unacceptable," but is also "irresponsible, unethical, and unprofessional." By its use of the "not safe," rationale to ground its moral and ethical conclusions, the NBAC intentionally chose to take an easy path around the more fundamental and profound ethical and moral issues. Unresolved by the Commission and apparently left open for debate and decision at a later time are: What if the SCNT method is eventually proved to be safe? What if other methods of safe cloning are developed? If safety is removed as an issue, is then moral and ethical to clone humans?

Lest one lose hope in the ability of our society to cope with the "Brave New World," the Internet now reports that you can sign up now to have your pet cloned. The New York Times Magazine reports that "...the idea of cloning has been normalized, even cute-ified, in remarkably short order."

ENDNOTES


4. "Cloning," is the verb form of the noun "clone," which means "A precise copy of a molecule cell, or individual plant or animal." "Cellular cloning" is "a process by which cells derived from the soma, or body, are grown in tissue culture in a laboratory. The genetic makeup of the resulting cloned cells, or cell line, is identical to that of the original cell. See NATIONAL BIOETHICS ADVISORY COMM'N, CLONING HUMAN BEINGS: REPORT AND RECOMMENDATIONS
5. The name Dolly is reportedly a reference to Dolly Parton. The cell which Dr. Wilmut used was taken from the "impressive" udder of the adult sheep. See John Arlidge, Scientists Able to Create Human Clones, Guardian (London), Feb. 26, 1997, at 6.


7. See NBAC Cloning Report, supra note 2 at i.


10. Id.


14. See NBAC Report, supra note 2 at 106.

15. Id.

16. Id.

17. Id. at 107.

18. Id.

19. Id.

20. Id.

21. Id.

22. Id. at 108.

23. Id.

24. Id.


29. See Human Cloning Prohibition Act (Introduced in the Senate) [S.1574. IS], Prohibition on Cloning of Human Beings Act of 1998 (Introduced in the Senate) [S.1602.IS], To Prohibit the Use of Federal Funds for Human Cloning Research. (Introduced in the Senate) [S.368.IS], Prohibition on Cloning of Human Beings Act of 1998 (Placed in the Senate)
Doctors

34. Symbol CRA, NYSE, its official full name is PE Corp.-Celera Genomics Grp. Other private companies in the race to map the human genome include Incyte Pharmaceuticals (symbol INCY, NASDAQ) and Human Genome Sciences (HGSI, NASDAQ).

35. See Berenson and Wade, supra note 1.

36. Id.

37. According to Celera’s website, its mission is “to become the definitive source of genomic, proteomic and related biological and medical information.” See http://celera.com/corporate/about.html

38. See The Markets: Stocks; Advances in Biotechnology and Retail Sales Spur Rally, N.Y. Times, April 7, 2000, at C6.


45. See U.S. Const amend. XIV, 1.


48. Id.


THE LONG AND THE SHORT OF IT: ARE EMPLOYER GROOMING CODES DISCRIMINATORY?

By

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As the country becomes more diverse, employers have seen more variations in personal appearance that may clash with the corporate culture. This paper will analyze a recent Connecticut case in which an employee claimed a discriminatory dismissal based on an unequal application of the company’s dress code.

INTRODUCTION

As the country becomes more diverse and individuals exercise their personal freedom, the workplace has seen a diversity of appearance and clothing styles. The “Man in the Gray Flannel Suit,” a 1950’s stereotype of business dress no longer applies as the workforce dresses more casually.

Can an employer fire an employee for wearing clothing the employer deems inappropriate, or can an employer dismiss a male employee for wearing long hair when other female employees can wear such a hairstyle?

Both of these issues were addressed in a recent Connecticut case, Hart v. Knights of Columbus1 which arose under Connecticut’s Fair Employment Practices Act,2 the state counterpart of Title VII of the Civil Rights Act of 1964. Such workplace issues are sure to recur in future cases as more and more employees claim that they are victims of such discrimination.

Robert Hart was a male college graduate holding a B.A. degree in Business Management, who sued his employer, the Knights of Columbus, a New Haven based religious organization. Hart was hired as a file clerk on November 10, 1996 and a few months later ran afoul of the Knights’ dress code which provided in part that:

“Dressy shorts or shorts of reasonable lengths may be acceptable only if they are part of a total outfit that presents a professional business-like appearance.”3

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1. See Washington v. Glucksberg, supra note 47.
2. See Skinner v. Oklahoma, supra note 50.
5. Id.
7. It has been reported on the Internet that a company called Genetic Savings and Clone will clone your pet. See http://www.discovery.com/news/briefs/20000218/tech_petcrones.html.