



## National Reference Center for Bioethics Literature

The Joseph and Rose Kennedy Institute of Ethics  
Box 571212, Georgetown University  
Washington, DC 20057-1212  
888-BIO-ETHX; 202-687-3885; fax: 202-687-6770  
e-mail: [bioethics@georgetown.edu](mailto:bioethics@georgetown.edu)  
<http://bioethics.georgetown.edu>

# SCOPE NOTE 42

## Bioethics and Cloning, Part 2

by

**Laura Jane Bishop and Susan Cartier Poland**

*This is Part 2 of a two-part Scope Note on Bioethics and Cloning. The two parts were published consecutively in the September and December 2002 issues of the Kennedy Institute of Ethics Journal.*

### I. ETHICAL PERSPECTIVES

Andrews, Lori B. *The Clone Age: Adventures in the New World of Reproductive Technology*. New York: Henry Holt and Company, 1999. 264 p.

Andrews sees “a world of difference between reproductive technologies . . . , which allow couples to make up for a missing ingredient in the normal reproductive process, and the technologies now being proposed to let dead men beget children, to reanimate dead fetuses, and to create children with only one genetic parent. The former techniques meet existing needs, while the latter create needs . . . ” (p. 256). She asserts that the same ethical and legal concerns about other reproductive technologies also apply to cloning, namely, “excessive commercialization, reckless experimentation on women, procedures undertaken without consent, unmonitored physical and psychological risks.” Andrews believes that scientists ought to have borne the burden of proof and been required “to give a good reason rather than a false promise before they began [cloning], to show why it was really necessary, and to design a system from the start to protect the participants” (p. 258).

Bioethics Advisory Committee (Singapore). *Ethical, Legal and Social Issues in Human Stem Cell Research, Reproductive and Therapeutic Cloning: A Report from the Bioethics Advisory Committee, Singapore*. Singapore: The Committee, June 2002; 1 v. (various pagings). [Available at <http://www.bioethics-singapore.org/bac/index.jsp>.]

The Committee recommends a complete ban on cloning human embryos for the purposes of reproduction, but would permit therapeutic cloning under strict regulation by a statutory body to be established for that purpose.

Bonnicksen, Andrea L. *Crafting a Cloning Policy: From Dolly to Stem Cells*. Washington, DC: Georgetown University Press, 2002. 220 p.

In the last chapter, "Toward Responsible Policymaking," Bonnicksen distinguishes four policy approaches (broad or narrow legislation, existing regulation or adjustments to it) to cloning. Mindful of change in both politics and science, she favors adjusting existing regulation as the best way to promote future discussion, debate, and deliberation.

Brannigan, Michael C. *Ethical Issues in Human Cloning: Cross-Disciplinary Perspectives*. New York: Seven Bridges Press, 2001. 244 p.

Drawing together essays from the perspectives of science, religion, philosophy, and law, Brannigan provides a useful anthology of resources for classroom use or personal study.

Brock, Dan W. **Human Cloning and Our Sense of Self**. *Science* 296 (5566): 314-16, 12 April 2002.

Brock responds to three philosophical arguments that cloning affects identity. He holds that cloning can only undermine genetic uniqueness, not full individuality; cloning does not change the equal moral value and respect due all persons as persons; and any feared loss of freedom or an open future comes from a mistaken belief in genetic determinism.

Cohen, Cynthia, ed. **Special Issue: Ethics and the Cloning of Human Embryos**. *Kennedy Institute of Ethics Journal* 4 (3): 187-289, September 1994.

Prompted by reported cloning by embryo splitting at George Washington University in

## TABLE OF CONTENTS

I. Ethical Perspectives. . . . .	1
II. Religious Perspectives. . . . .	8
III. Fiction and Film. . . . .	12

Washington, DC, authors offer a full discussion of the concerns raised by human cloning by whatever means. Articles include Ruth Macklin's "Splitting Embryos on the Slippery Slope: Ethics and Public Policy" and the National Advisory Board on Ethics in Human Reproduction's (NABER) "Report on Human Cloning through Embryo Splitting: An Amber Light."

Danish Council of Ethics. *Cloning—Statements*. Copenhagen: The Council, 2002. 51 p. [Available at <http://www.etiskraad.dk/sw329.asp>.]

Although individual Council members differ on the moral status of the early human embryo and the ethical defensibility of doing research on early human embryos (such as creating cloned embryos for stem cells or cloning stem cells removed from existing embryos), they unanimously reject human cloning for reproduction. Taken comprehensively, compelling arguments that confirm the ethical unacceptability of reproductive cloning are: cloning violates human dignity; a cloned person is denied an open future; and reproductive research will not accord embryos due respect. Any clone is a full person and should enjoy all human rights and opportunities.

Davis, Dena S. **Cloning**. In her *Genetic Dilemmas: Reproductive Technology, Parental Choices, and Children's Futures*, pp. 107-28. New York: Routledge, 2001.

Davis sorts the motivations for cloning into two categories: logistical and duplicative. Logistical cloning fulfills the desire for a child by overcoming biological problems that prevent procreation; duplicative cloning focuses on the desire for genetic replication. Davis holds that most duplicative motivations are unethical and harmful to children because they treat children as a commodities and limit children's right to an open future. She advocates

gatekeeping by health professionals to ensure cloning is not used except in the very few cases she identifies as ethically acceptable. Interestingly, Davis treats creating a child who can donate bone marrow to save the life of an existing child as an exceptional case because the duplicative motivation is only “a small part of the child’s existence” (p. 119).

Do No Harm: The Coalition of Americans for Research Ethics. ***Do No Harm Position Statement on Human Cloning***. [Available at <http://www.stemcellresearch.org/info/cloningstatement.htm>.] 2 p.

Calling for a comprehensive ban on human cloning, Do No Harm rejects the distinction between therapeutic and reproductive cloning and decries the terminology as misleading and prejudicial. “We hold that creating a new human life for destructive experimentation is, at a minimum, as unethical as creating it for live birth, not less so.”

Editors of *Scientific American*. ***Understanding Cloning***. New York: Warner Books, 2002. 136 p. Among the topics of the articles from *Scientific American* reprinted here are plant and animal cloning, transgenic livestock for drug production, xenotransplantation, Ian Wilmut’s essay on cloning for medicine, and President Bush’s remarks on stem cell research.

Evers, Kathinka. ***The Identity of Clones***. *Journal of Medicine and Philosophy* 24 (1): 67-76, February 1999.

Evers argues that the protest against cloning on the grounds that identical individuals will be produced rests on an ambiguous use of the concept of identity itself and its application to cloning. Drawing on classical philosophical discussions of identity, Evers tries to show that clones are distinguishable based on Leibniz’s Law (objects are indiscernible only if they are identical in all properties and features) and points to their individual identities found in differences in genetic, physiological, perceptual and cognitive, and personality characteristics.

Great Britain. Department of Health. ***Government Response to the Recommendations Made in the***

***Chief Medical Officer's Expert Group Report “Stem Cell Research: Medical Progress with Responsibility.”*** August 2000. [Available at <http://www.doh.uk/cegc/govresp.htm>.] 7 p.

The government accepts the above report in full and affirms the recommended extension of the regulations governing purposes for which embryos may be used in research. It also seconds the recommendation that research councils seriously consider establishing collections of cell lines for research use to avoid the repeated need to create or import new cell lines.

Great Britain. Department of Health. Chief Medical Officer's Expert Advisory Group on Therapeutic Cloning. ***Stem Cells: Medical Progress with Responsibility***. London: Department of Health, 16 August 2000. [Available at <http://www.doh.gov.uk/cegc/>.] 10 p.

Creation of human embryos by somatic cell nuclear transfer (SCNT) is permissible under the 1990 Act for any of the five research purposes it currently specifies, as long as no other means exist to meet research objectives. With the same caveat, the group recommends that the 1990 Act be expanded to permit research on human embryos created by in vitro fertilization or SCNT for two purposes: to increase understanding of human disease and disorders and their cell-based treatments and to perform research on human embryos created by SCNT in order to understand and develop treatments for mitochondrial diseases. Transfer into a uterus of an embryo created by SCNT should remain a criminal offense, and mixing adult somatic cells with live eggs of any animal species should not be permitted.

Great Britain. Department of Health [and] Department of Trade and Industry. Office of Science and Technology. ***Government Response to the Report by the Human Genetics Advisory Commission and the Human Fertilisation and Embryology Authority on Cloning Issues in Reproduction, Science and Medicine***, June 1999. [Available at <http://www.doh.gov.uk/cloning.htm>.] 5 p.

Preferring continued monitoring over legislation, the British government requests the advice of an expert group of the Chief Medical Officer before endorsing the above recom-

mentation to expand the definition of acceptable embryo research.

Great Britain. Human Genetics Advisory Commission [and] Human Fertilisation and Embryology Authority. *Cloning Issues in Reproduction, Science and Medicine: A Report by a Joint Working Group of the UK Human Genetics Advisory Commission and the UK Human Fertilisation and Embryology Authority*. London: Human Genetics Advisory Commission, December 1998. In *The Cloning Sourcebook*, ed. Arlene Judith Klotzko, pp. 293-316. New York: Oxford University Press, 2001.

The group recommends legislation to ban human reproductive cloning and the expansion of the Human Fertilisation and Embryology Act 1990 definition of acceptable human embryo research to include development of therapies for mitochondrial diseases and diseased or damaged tissues or organs. The report notes wide social acceptance of the moral principle that human beings ought never be treated merely as means to an end, but only as ends in themselves, as the central ethical issue. The ban on reproductive cloning ought to be revisited in five years.

Green, Ronald M. **The Cloning Controversy**. In his *The Human Embryo Research Debate: Bioethics in the Vortex of Controversy*, pp. 107-31. New York: Oxford University Press, 2001.

Green, a member of the NIH Human Embryo Research Panel, offers a historical overview of human embryo research in the United States. Critical of the National Bioethics Advisory Commission's public process and report on cloning, he points to the prominence given by government to religious views; the dangerous new precedent for federal control of life sciences research through federal legislation; a missed opportunity to put human embryo research back on the public agenda; and an inadequate philosophical account of the obligation to avoid harm to children through the very techniques used to bring them about.

Humanist Laureates of the International Academy of Humanism. **Declaration in Defense of Cloning and the Integrity of Scientific Research**. *Free Inquiry* 17 (3): 11-12, Summer 1997.

Eager to realize the maximum benefits of cloning, the signers also realize that guidelines are needed to prevent abuse. They state that "the moral issues raised by cloning are neither larger nor more profound than the questions human beings have already faced in regard to such technologies as nuclear energy, recombinant DNA, and computer encryption. They are simply new" (pp. 11-12). Human reason will prove equal to resolving issues raised by this technology; religious dogma should not rule the day.

*Journal of Medical Ethics* 25 (2): 75-214, April 1999. [Special issue on the new genetics]

Authors address a range of issues associated with cloning, including, child welfare, threats to autonomy, clones as sources for tissue transplantation, killing, the obligations of physicians, and quality of life. Several argue in favor of cloning individuals for purposes of both reproduction and transplantation; others either would permit cloning in certain circumstances or would prohibit it across the board.

Kass, Leon R., and Wilson, James Q. *The Ethics of Human Cloning*. Washington, DC: AEI Press, 1998. 101 p.

This volume reprints and updates two 1997 essays, Kass's "The Wisdom of Repugnance" and Wilson's "The Paradox of Cloning." Kass argues that accepting cloning technology will greatly dehumanize us and further weaken our respect for "sexuality, procreation, nascent life, family, and the meaning of motherhood, fatherhood and the links between generations." He charges bioethicists with the naive belief that compassion, regulation, and respect for autonomy can avoid the evils associated with cloning. Wilson believes that the gains from human cloning will exceed the risks, as long as cloning is only permitted on behalf of two married partners and the mother herself carries the resulting infant to term (except in special medical conditions).

Klotzko, Arlene Judith, ed. *The Cloning Sourcebook*. Oxford: Oxford University Press, 2001. 328 p.

Covering the science of cloning, its popular and cultural contexts, ethical concerns, and

public policy and regulatory issues, these essays provide unique perspectives or important voices, including “Cloning in the Popular Imagination” by Dorothy Nelkin and Susan Lindee; “Cloning Humans and Cloning Animals” by Peter Singer; “Animal Cloning: The Pet Paradigm” by Klotzko; “Reflections on the Interface of Bioethics, Public Policy, and Science” by Harold T. Shapiro; and “The Regulation of Technology” by Mary Warnock. The European Commission’s Group of Advisers’ report on genetic modification of animals and the UK’s Joint Working Group report on “Cloning Issues in Reproduction, Science and Medicine” are reprinted. Much, but not all, of the material also appears in the Spring 1998 issue of the *Cambridge Quarterly of Healthcare Ethics* 7 (2): 115-205.

Lauritzen, Paul, ed. *Cloning and the Future of Human Embryo Research*. Oxford: Oxford University Press, 2001. 291 p.

Lauritzen addresses the moral status of the preimplantation embryo (respect, acceptability of research, creation of embryos for research, and the consequences of the view that every cell is sacred), samples the ethical and theological debates about cloning, and explores public policy issues (regulating research, achieving ethical and political consensus, creating a paradigm for public discussion, and legislating about cloning at the federal, state, and international levels). Executive summaries of the Human Embryo Research Panel report and the National Bioethics Advisory Commission report on cloning are reprinted.

MacKinnon, Barbara, ed. *Human Cloning: Science, Ethics, and Public Policy*. Urbana, IL: University of Illinois Press, 2000. 171 p.

Prepared for a 1998 conference of the same name, the essays provide a concise overview of facts and concerns related to cloning. Bonnie Steinbock provides an overview and critique of a variety of ethical concerns; Jorge Garcia views cloning as another intervention that treats human life as of instrumental value; and R. Alta Charo and Andrea Bonnicksen each discuss issues related to the formation of public policy on cloning.

Mahowald, Mary B. **Genes, Clones, and Gender Equality**. *DePaul Journal of Health Care Law* 3 (3 & 4): 495-526, Spring/Summer 2000.

Mahowald points out that “human cloning from embryos entails disproportionate burdens for women . . . [e]ven if an equal number of men and women participated in the process, women alone would be undergoing the risks, pain, and discomfort of ova stimulation, ova retrieval, embryo transfer, gestation, and childbirth.” Women’s sole control of eggs is unlikely to reverse sexism. She explores the implications for parenthood of new genetic relationships made possible by cloned children and concludes that rearing parents ultimately trump genetic, gestational, and lactating parents.

McCormick, Richard A. **Who or What Is the Preembryo?** *Kennedy Institute of Ethics Journal* 1 (1): 1-15, March 1991.

The Catholic Church asserts that human life must be protected from the time of fertilization, but McCormick points out that Church documents refer only to simple genetic individuality or uniqueness (which occurs at fertilization), but not to developmental individuality (the point at which natural splitting or recombination can no longer occur). He suggests that “preembryo” is a morally neutral term and a more scientifically accurate description of the earliest stages of mammalian development—“the establishment of the nonembryonic trophoblast, rather than the formation of an embryo” (p. 1). McCormick contends that moral status, specifically personhood, is related to reaching developmental individuality. He holds that there “[a]re very strong reasons for maintaining that the preembryo is not yet a person” (p. 11), but argues that a strong, *prima facie* obligation exists to treat the preembryo as a person in light of its intrinsic potential and any lingering uncertainties about its status. National guidelines should govern any human embryo research.

McGee, Glenn, ed. *The Human Cloning Debate*. Berkeley, CA: Berkeley Hills Books, 1998. 270 p.

Essays situate cloning within the familial context, as well as, in the political, religious, philosophical, and public policy settings.

McGee and Ian Wilmut argue that an adoption model may best govern the creation of families through cloning because it is an approach concerned with the interests of both parents and children and permits community counsel, oversight, and control over parenting arrangements. Philip Kitcher argues that we ought to create a coherent policy for the use of all genetic and reproductive technologies so that their use improves human well-being. The volume concludes with a short work of fiction by Richard Kadrey.

Murphy, Julien S. **Human Cloning and the Problem of Scarcity: A Sartrean Perspective.** In *Globalizing Feminist Bioethics; Crosscultural Perspectives*, ed. Rosemarie Tong, pp. 198-211. Boulder, CO: Westview Press, 2001.

Murphy assesses cloning from the Sartrean framework of scarcity and in light of Sartre's claim that the exercise of freedom to act against scarcity has unintended consequences. Murphy starts with the premise that cloning is a response to the scarcity of specific DNA, and he notes as ironic the unintended consequence of destroying the uniqueness of genetic material by cloning it. According to Murphy, for Sartre the concern about cloning is its effect on human dignity—the possibilities for people within society, or “what we make of ourselves”—and not the sanctity of the human embryo.

National Bioethics Advisory Commission (NBAC). **Cloning Human Beings. Volume I: Report and Recommendations of the National Bioethics Advisory Commission.** Rockville, MD: NBAC, June 1997. 106 p. [Available at <http://bioethics.georgetown.edu/nbac>.]

NBAC's first report is also the first U.S. governmental advisory body report on human cloning. It provides an overview and discussion of the science of cloning, religious and ethical concerns, and legal and policy considerations. Unacceptable physical and health risks of nuclear transfer for both the fetus and the gestational mother make any use of cloning to create a child morally unacceptable. Given only 90 days to produce its report, the commission identifies several serious ethical and theological concerns about reproductive

cloning that require more widespread and careful consideration and analysis. NBAC recommends: (1) continuing the moratorium on using of federal funds for reproductive cloning; (2) enacting federal legislation prohibiting human cloning to create a child; (3) promoting international cooperation on enforcement of mutually held restrictions on cloning; (4) continuing cloning research using human molecules or cells; and (5) promulgating no new regulations on the humane use of animals in cloning research.

National Bioethics Advisory Commission (NBAC). **Cloning Human Beings. Volume II: Commissioned Papers.** Rockville, MD: National Bioethics Advisory Commission, June 1997. [Multiple pages]. [Available at <http://bioethics.georgetown.edu/nbac>.]

This volume offers an international and multidisciplinary overview of positions on cloning and a consideration of whether research moratoria work. The papers include “Religious Perspectives on Human Cloning,” by Courtney S. Campbell and “An Assessment of the Ethical Issues Pro and Con,” by Dan W. Brock, as well as papers on animal cloning.

National Institutes of Health (U.S.). Ad Hoc Group of Consultants to the Advisory Committee to the Director. **Report of the Human Embryo Research Panel, Volume I, and Papers Commissioned for the Human Embryo Research Panel, Volume II,** 1994. 129 p. and 407 p.

Mandated to consider research involving the *ex utero* preimplantation human embryo, the panel concludes that sufficient argument exists to permit federal funding of some research on such embryos within strict guidelines. Although many panel decisions were not unanimous or carried only by a bare majority, the panel did establish general principles and specific guidelines for the research. Creation of embryos for research purposes was deemed permissible under two conditions: (1) the research could not otherwise be conducted, and (2) the validity of a study promising outstanding scientific and therapeutic value could not otherwise be guaranteed. With regard to cloning, federal funding is acceptable for nuclear transplantation research (with-

out uterine transfer) to avoid or correct an inherited mitochondrial defect or for embryonic stem cell research using either cells from spare IVF embryos or embryos donated for research with express consent. Unacceptable research includes the development of chimeras, SCNT to increase the number of genetically identical embryos for transfer, and the transfer of human embryos into animals for gestation.

Pence, Gregory E., ed. *Flesh of My Flesh: The Ethics of Cloning Humans: A Reader*. Lanham, MD: Rowman & Littlefield, 1998. 154 p.

Pence asserts that only voices opposed to human cloning have had a public hearing and, despite weak arguments, this vocal anti-cloning consensus has stymied any ability to have a good debate on the issue. In his own essay, Pence philosophically examines arguments for and against reproductive human cloning. Other authors commenting on cloning include paleontologist Stephen Jay Gould (worries about potential abuses, but wants to emphasize the environmental influence on genetic expression), Lutheran theologian Gilbert Meilaender (who asserts that it destroys the mystery of human creation and weakens the idea of children as a gift of God's grace), philosopher Philip Kitcher (who maintains that it fails to recognize children as independent beings and fails to contribute to a just society), evolutionary geneticist R. C. Lewontin (who argues against genetic reductionism and is critical of NBAC's focus on religious issues rather than ethical concerns), and philosopher Timothy F. Murphy (who discusses cloning as a means of reproduction for gay persons).

President's Council on Bioethics (U.S.). *Human Cloning and Human Dignity: An Ethical Inquiry*. New York: PublicAffairs, 2002. 350 p. [Available at <http://www.bioethics.gov/cloningreport/>.]

The Council is unanimous in its position that "cloning to produce children" is unsafe, morally unacceptable, and ought not to occur. Members are far more divided on the issue of "cloning for biomedical research." When the issue is considered independently, seven members recommend regulated "cloning for

biomedical research;" seven favor a ban, and three opt for a moratorium (pp. 128-29). For public policy purposes, a ten-member majority supports a ban on "cloning to produce children" combined with a four-year national moratorium on "cloning for biomedical research." The other seven members also recommend a ban on "cloning to produce children," but support moving ahead with the use of cloned embryos for biomedical research with appropriate regulations. A full understanding of these recommendations cannot be obtained without reading the report text conveying the ethical reasoning on which they depend.

Rantala, M. L., and Milgram, Arthur J., eds. *Cloning: For and Against*. Chicago, IL: Open Court, 1999. 277 p.

Rantala and Milgram selected 54 previously published, short pieces on cloning to produce a collection of readings organized around 11 themes and intended to stimulate classroom debate. The volume includes introductory essays for each section and a background piece on science to guide the user.

Robertson, John A. **What We May Do With Preembryos: A Response to Richard A. McCormick**. *Kennedy Institute of Ethics Journal* 1 (4): 295-302, December 1991 [and] McCormick, Richard A. **The Preembryo as Potential: A Reply to John A. Robertson**. *Kennedy Institute of Ethics Journal* 1 (4): 303-305, December 1991.

Robertson argues that McCormick's claim of an existing *prima facie* obligation to treat preembryos as persons would restrict too greatly reproductive technology practices with embryos, such as donation, cryopreservation, research, preimplantation genetic diagnosis, and disposal. Robertson states "[i]f preembryos are not persons, then how we treat them is a matter of policy, not moral obligation" (p. 295), and he urges a less stringent standard. McCormick identifies assumptions in Robertson's approach—e.g., that the benefits of research always outweigh any preembryo claims—and reasserts his own view that treating preembryos as persons is a moral obligation and cannot be reduced simply to a policy issue.

Silver, Lee M. *Remaking Eden: Cloning and Beyond in a Brave New World*. New York: Avon Books, 1997. 317 p.

Silver explores developments in “reprogenetics” (his term for the intersection of reproductive and genetic technologies) and offers a clear explanation of the science with attention to associated ethical concerns. His chapters on cloning lie within a broader discussion of the impact of reproductive technologies and genetic engineering on human relationships and genetics.

The Wellcome Trust. Medicine in Society Programme. *Public Perspectives on Human Cloning: A Social Research Study*. London: The Trust, 1998. 72p. [Available at <http://www.wellcome.ac.uk/>, printed 18 September 2002].

When interviewed before learning about cloning technology, participants had ready opinions and general knowledge about related social and ethical issues, but their discussions became increasingly sophisticated and complex following more formal exposure to information about the technology. The summary narrative is enhanced by numerous direct quotes from study members. The researchers conclude that proactive methods are required to enable genuine public participation in policy discussions. They suggest that such discussions should be time-extended and deliberative with open access to expert information.

Wilmut, Ian; Campbell, Keith; and Tudge, Colin. *The Second Creation: Dolly and the Age of Biological Control*. New York: Farrar, Straus and Giroux, 2000. 333 p.

This detailed history of the scientific work and the people at the Roslin Institute who were involved in the research that produced Dolly and several other cloned and transgenic animals closes with two chapters that examine the ethical concerns associated with the new biotechnology and the desire to clone humans.

Winters, Paul, ed. *Cloning*. San Diego, CA: Greenhaven Press, 1998. 89 p.

Part of the “Opposing Viewpoints”® series, this book offers brief essays by authors who marshal arguments for and against cloning.

Yount, Lisa, ed. *Cloning*. San Diego, CA: Greenhaven Press, 2000. 176 p.

Yount collected 27 previously published pieces on cloning representing a range of views. Designed for the young adult audience, the text includes a glossary and a list of organizations. Her selections are longer, more culturally topical and with less pro and con debate style than those collected by Rantala and Milgram (above).

## II. RELIGIOUS PERSPECTIVES

Alonso, Kenneth. *Shall We Clone a Man? Genetic Engineering and the Issues of Life; A View From a Catholic Physician Scientist*. Atlanta, GA: Allegro Press, 1999. 180 p.

Roman Catholic and Russian-Greek Orthodox theologians reviewed and approved this revised Ph.D. dissertation in theology.

Baha’i Faith. Universal House of Justice. Department of the Secretariat [*Comment on Stem Cells and Cloning*], 23 August 2001. [Available at <http://bahai-library.org/uhj/stem.cells.html>.] 2 p.

The House of Justice regards giving official consideration to stem cell research, its therapeutic applications, and their spiritual consequences as premature. At present, believers should come to their own conclusions based on knowledge of Baha’i teachings about the nature and purpose of life, but should not represent these conclusions as a teaching of the Faith.

Broyde, Michael J. *Cloning People and Jewish Law: A Preliminary Analysis*. *Jewish Law*. [Available at <http://www.jlaw.com/Articles/cloning.html>.] 28 p.

Rabbi Broyde considers relationships, especially those involving a clone-born human’s parentage and family, in his assessment of cloning. Under Jewish law, a male genetic donor is usually considered the child’s father, but, because the traditional Jewish definition of motherhood is tied to gestation and birthing, the parental status of a female genetic donor is in question, especially when a gestational surrogate is involved. Jewish law requires an assessment of all the consequences

of an act before determining its permissibility. Broyde is unaware of any substantive violation of Jewish law when cloned cells of one human being are put into the egg of another and the resulting fertilized egg is implanted into a gestational mother. Furthermore, under both biblical and rabbinic Jewish law, only the man, not the woman, is obligated to procreate. When a man cannot fulfill this obligation to procreate (a minimum of two children, a boy and a girl), either naturally or with other assisted reproductive technologies, then cloning can be classified as a religious good deed. With a woman in the same circumstances, cloning, though permissible, is only religiously neutral. Cloning a child to save a dying child is viewed as two good deeds—reproducing, and saving a life.

Campbell, Courtney S., ed. **Human Cloning: Fact, Fiction, and Faith.** *Reflections: Newsletter of the Program for Ethics, Science and the Environment.* Oregon State University: Program for Ethics, Science, and the Environment, Department of Philosophy, May 1997. 16 p. [Special issue]

Short scholarly essays and denominational statements represent Native American, Orthodox Christian, African American, Buddhist, Hindu, Islamic, Judaic, Catholic, and Southern Baptist views on human cloning. Minister Abraham Akaka suggests that aboriginal people might find cloning a way to preserve and perpetuate their unique identities, while Native American philosopher Viola Cordova states that cloning is unjustified because of its repercussions for all human kind. Marian Gray Secundy and Kenneth S. Robinson address the need for public education and openness in research to overcome the distrust and fear of science and medicine experienced by many ethnic Americans.

**Center for Genetics and Society.** Website. [Available at <http://www.genetics-and-society.org/index.asp>.]

On its “Constituencies, Religious Communities” pages, this nonprofit center offers links to the position statements by religious communities on cloning and other genetic technologies.

Chapman, Audrey R. **Religious Contributions to**

**the Debate on Cloning.** In her *Unprecedented Choices: Religious Ethics at the Frontiers of Genetic Science*, pp. 77-124. Minneapolis: Fortress Press, 1999.

Chapman summarizes and analyzes the initial response from the theological community to the announcement of Dolly’s birth, contrasts secular ethical perspectives on cloning with those founded in theological principles, provides an overview of the perspectives of individual moral theologians and official religious bodies, and addresses basic questions surrounding religious ethics in a secular society.

Church of Scotland. **Society, Religion and Technology (SRT) Project.** [Available at <http://dspace.dial.pipex.com/srtscot/contents.shtml>.] [Church of Scotland (1999) Submission to the Chief Medical Officer's Expert Group on Cloning (CEGC), October 1999, Society, Religion and Technology Project and the Board of Social Responsibility, Church of Scotland, Edinburgh]

The project, begun in 1970 to study the ethical issues and implications of science and technology for humans and their environment, brings the insights of Christian ethics to an unbiased examination of the issues through expert working groups and other forms of analysis to inform the Church of Scotland and provide resources for other churches throughout Europe. The website has a “Cloning Homepage” and many pages on cloning and stem cells.

Cole-Turner, Ronald, ed. **Beyond Cloning: Religion and the Remaking of Humanity.** Harrisburg, PA: Trinity Press International, 2001. 152 p.

Cole-Turner’s compilation of original essays shares insights from the Christian tradition: Kenneth Culver reflects on “The Christian Physician at the Crossroads of New Genetic Technologies and the Needs of Patients;” Presbyterian theologian Nancy J. Duff asserts that Christian theology can enter in to the shaping of scientific developments by lifting up a concern for the weak; Catholic theologian Lisa Sowle Cahill considers cloning within the framework of a just society; Protestant theologian Sondra Wheeler explores parenthood in the face of contingency, uncertainty, and even tragedy; and Demetri Demopulous, an Ortho-

dox priest and geneticist, provides his tradition's view of cloning and related technologies.

Cole-Turner, Ronald, ed. *Human Cloning: Religious Responses*. Louisville, KY: Westminster John Knox Press, 1997. 151 p.

Twelve essays written specifically for this volume explore the theological and ethical concerns roused by human cloning from the Christian perspective. Authors represent the Church of Scotland, Lutheran, Presbyterian, Methodist, Catholic, and Southern Baptist denominations, and broad theological reflection. This book won the 1997 John Templeton Society Prize for Outstanding Books in Theology and Science.

Conference of European Churches (CEC). Church and Society Commission. Working Group on Bioethics and Biotechnology. *Therapeutic Uses of Cloning and Embryonic Stem Cells*. [Available at <http://www.cec-kek.org/English/cs.htm>.]

The European regional ecumenical organization for more than 40 years, the Council currently is comprised of 123 churches and 25 associated organizations representing all faith traditions (Protestant, Orthodox, Reformed, Old Catholic, and Pentecostal) except Roman Catholic. Its Working Group on Bioethics has published two position papers, "Cloning Animals and Humans" in May 1998 and "Therapeutic Uses of Cloning and Embryonic Stem Cells" in September 2000. Seeking a view acceptable to all member churches, CEC puts the highest research priority on the determination of the reprogrammability of adult stem cells.

Ebrahim, Abul Fadl Mohsin. **Human Cloning**. In his *Organ Transplantation, Euthanasia, Cloning and Animal Experimentation: An Islamic View*, pp. 68-75. Leicester, United Kingdom: The Islamic Foundation, 2001.

Muslim religious scholars have decreed a *fatwā* against all human cloning. Resolutions on cloning made by the Islamic Fiqh Academy (a group of Muslim scholars and jurists) in 1997 are reprinted. Although human cloning does not compromise Muslims' belief that Allah is the Ultimate Creator because Allah

clearly created somatic and reproductive cells, the potential harms from therapeutic uses of such technology outweigh any good. For example, human cloning will undermine the institution of marriage and disrupt Islamic laws of inheritance and it may tempt people to try to reverse aging (the one disease for which Allah did not provide a cure) and/or to engage in the sale of cloned embryos and body parts.

Evans, John H. *Cloning Adam's Rib: A Primer on Religious Responses to Cloning. A Report Prepared for the Pew Forum on Religion and Public Life*. Unpublished document, March 2002. [Available at <http://pewforum.org/>.]

Evans offers a brief summary of positions and public statements by religious groups on the issue of cloning.

Falls, Evelyn; Skeel, Joy D.; and Edinger, Walter. **The Koan of Cloning: A Buddhist Perspective on the Ethics of Human Cloning Technology**. *Second Opinion* 1: 44-56, September 1999.

The authors point out that the general Buddhist perspective on cloning differs radically from that in Western secular and religious thinking. Cloning violates Western notions of individualism and uniqueness, but in Buddhism there is no concept of the self. Two other fundamental and interrelated Buddhist truths or "marks" bear on this issue. First, all is impermanent and, second, suffering is entwined with existence. Because of impermanence, "there is nothing that has a permanent abiding identity that could be called a 'self'." Relying on "Koan," the nonlogical riddles and parables used within Zen teachings to abandon dualistic thought and realize enlightenment, the authors conclude that intent is important in determining whether cloning is morally acceptable, but intent offers no definitive answer because traditional Buddhism aims to escape the dualism of good and bad.

Hansen, Bart, and Schotsmans, Paul. **Cloning: The Human as Created Co-Creator?** *Ethical Perspectives: Journal of the European Ethics Network* 8 (2): 75-87, 2001.

The authors encourage speaking of "cloning with either a reproductive or a therapeutic objective" to avoid confusion. Stem cell re-

search (using embryonic and/or adult cells) for therapeutic purposes and cloning for reproductive uses make the moral status of the human embryo a central ethical question. A substantive examination of what it means to be “playing God” (a common objection to cloning), the meaning and limits of human co-creation, and the lessons contained in Jesus’s healing acts are brought to bear on the acceptability of cloning. The authors conclude that both elements of our human status as “created co-creators” must constantly be held together to ensure that fulfilling our call to apply technology in “co-creating” with God “God’s Kingdom” on earth is not subverted for evil purposes by our vulnerability to sin as “created” creatures.

Lindsay, Ronald A. **Taboos Without a Clue: Sizing Up Religious Objections to Cloning.** *Free Inquiry* 17 (3): 15-18, Summer 1997.

Lindsay demonstrates his assertion that moral problems should be addressed using reason, deliberation, and secular ethical principles by responding to some of the arguments against cloning made by theologians and religious thinkers. He charges that the ban on cloning experiments supported by the religious is a “tacit admission that their theological principles are not sufficiently powerful and adaptable to guide us through this challenging future” (p. 17).

Mieth, Dietmar. **Ethics, Morality and Religion.** In *Ethical Eye: Cloning*, Anne McLaren, coordinator, pp. 119-40. Strasbourg: Council of Europe Publications, 2002.

According to Mieth, the fundamental difficulty in the European Community’s public policy discussions about human cloning remains the range of opinion among nation-states about what constitutes a human being (from the early embryo to a newborn child). He draws attention to the “politics of language” used to advocate or to protest cloning and argues against the arbitrary distinction between embryos for implantation and those for research. Mieth suggests that theological arguments can change the ethical context and can model a form of discourse for solving controversial problems.

Pontificia Academia Pro Vita. **Reflections on Cloning.** Città del Vaticano: Libreria Editrice Vaticana, 1997. [Available at [http://www.vatican.va/roman\\_curia/pontifical\\_academies/acdlife/documents/rc\\_pa\\_acdlife\\_doc\\_30091997\\_clon\\_en.html](http://www.vatican.va/roman_curia/pontifical_academies/acdlife/documents/rc_pa_acdlife_doc_30091997_clon_en.html).] 6 p.

After opening with a quote from Hans Jonas—in which cloning is “both in method the most despotic and in aim the most slavish form of genetic manipulation; its objective is not an arbitrary modification of the hereditary material but precisely its equally arbitrary fixation in contrast to the dominant strategy of nature”—the Academy outlines a number of ethical objections to cloning, including its “radical manipulation of the constitutive relationality and complementarity” of human procreation, the radical exploitation of women who are reduced to purely biological functions, the perversion of basic human relationships, its foundation in industrial production, and dominion over the very existence and biological identity of others. Research on cloned embryos without uterine transfer avoids none of the moral injunctions and indeed represents an arbitrary use of the human body as a mere research tool.

Seventh-Day Adventist Church. General Conference Executive Committee. **Statement on Ethical Considerations Regarding Human Cloning.** Iguazu Falls, Brazil: The Church, 4 October 1998. [Available at <http://www.stanet.ch/APD/1998/inf987.htm>.] 5 p.

The present knowledge and capabilities of cloning by nuclear transfer make its use on humans unacceptable by the Seventh-Day Adventist Church, although continued appropriate research on animals is acceptable. Seven principles must govern human cloning: protection of vulnerable human life, protection of human dignity, alleviating human suffering, family support, stewardship, truthfulness, and understanding God’s creation.

Southern Baptist Convention. **Resolution No. 2 on Human Cloning.** New Orleans, LA: Southern Baptist Convention, 12-13 June 2001. [Available at <http://www.sbcannualmeetings.org/sbc01/sbcresolution.asp?ID=2>.] 2 p.

Calling the cloning of a human being a “deci-

sive step toward substituting human procreation with biological manufacturing of humans” and decrying the wanton destruction of human embryos used for research, the Resolution repudiates cloning of human embryos for both reproduction and research. The Denominational Statement clearly accepts the use of nuclear transfer or other cloning techniques to produce molecules, DNA, cells, tissues, organs, plants, or animals.

Union of Orthodox Jewish Congregations of America and the Rabbinical Council of America. ***Cloning Research, Jewish Tradition & Public Policy: A Joint Statement by the Union of Orthodox Jewish Congregations of America and the Rabbinical Council of America.*** New York: Union of Orthodox Jewish Congregations of America, 13 March 2002. [Available at <http://www.ou.org/public/publib/cloninglet.htm>.] 2 p.

Drawing from the Torah’s emphasis on the great value of human life, this joint statement follows the traditional Jewish stance of maximizing the potential to save and heal human lives as an integral part of valuing human life, while maintaining the fundamental respect and sanctity of human life. Thus, therapeutic cloning ought to be pursued, but cloning for reproductive purposes is opposed. Jewish tradition does not accord an *in vitro* embryo with full human status, therefore the production, use, and destruction of cloned human embryos is not seen as destructive of life. [The Rabbinical Assembly, an international association of Conservative Jewish rabbis, also approved a position statement on stem cell research and cloning on 13 March 2002.]

United Church of Christ (UCC). **Resolution: The Cloning of Mammalian Species.** In *United Church of Christ. Minutes of the Twenty-First General Synod of the United Church of Christ*, pp. 15-17. Columbus, OH, 3-8 July 1997. Cleveland, OH: UCC, 1997.

The Synod urges further discussion, both inside and outside of the church, about the theological and ethical issues associated with cloning and research on human and nonhuman mammalian species. Justice concerns must receive particular attention. A more substantive, although unofficial, statement was

authored by the UCC Ad-Hoc Committee on Genetics, and is available at <http://www.wfn.org/1997/06/msg00076.html>.

United Methodist Church (UMC). General Conference. **Resolution No. 91: Human Cloning.** *2000 Book of Resolutions*, pp. 253-55. Nashville, TN: Abingdon, The United Methodist Publishing House, 2000. [Available at <http://www.infoserv.umc.org/faq/stemcellresearch.htm>.]

In 2000, the General Conference of the UMC passed a resolution to ban all human cloning, including the cloning of human embryos, based on social and theological concerns, such as the misuse of people, the exploitation of women, damage to the connections within families, the loss of genetic diversity, commercial control and profit from research, and the invasion of privacy. The Conference also called for a ban on all therapeutic, medical, research, and commercial procedures that generate waste embryos and encouraged all nations to ban human cloning and to identify governmental bodies to enforce the ban. Additional resources on cloning (and related issues) are at the UMC News Services link above and at <http://umns.umc.org/backgrounders/cloning.html>.

Willer, Roger, ed. ***Human Cloning: Papers from a Church Consultation*** [13-15 October 2000]. Chicago, IL: Evangelical Lutheran Church in America (ELCA), 2001. 94 p.

Published by the Department for Studies of the Division for Church in Society, the articles in this book do not represent an official statement of ELCA, but are intended to promote discussion within the denomination and in society at large. The articles range from the science behind cloning, to social justice questions, the Lutheran theological response to cloning, concerns about coercion of women as egg sources, stem cell research, and the legal implications of cloning.

### III. FICTION AND FILM

Anthony, Piers. **In the Barn.** In *Again, Dangerous Visions: 46 Original Stories*, ed. Harlan Ellison, pp. 392-419. Garden City, NY: Doubleday, 1972.

Although not directly concerned with cloning,

commodification is at issue in this story about animal rights and the use of persons as means not ends.

Brin, David. *Kiln People*. New York: Tor Books, 2002. 336 p.

Brin, scientist turned science fiction writer, creates a world with multiple, short-lived clones based on physics, not biology. His porcelain bake-off clones exist to serve specific needs (sensual, intellectual, and the like) and gather information and experiences that can be uploaded into the human prototype. Multiple existences of one personality create problems for time and reality.

Case, John. *The Genesis Code*. New York: Ballantine Books, 1998, c1997. 467 p.

Case's *New York Times* bestseller is best described as a biomedical thriller. A reporter writing under a pseudonym, Case turns the idea of cloning a monster into cloning a messiah.

Clute, J., and Nicholls, P., eds. *The Encyclopedia of Science Fiction*. New York: St. Martin's Press, 1993. 1370 p.

The entry "Clones" is a brief history of clones in the science fiction literary genre. *Four-Sided Triangle*, by William F. Temple, published in 1949 is the first mention of replication of human individuals. The first prominent use of the word "clone" comes much later, in 1965, in a short story entitled "The Clone," by Theodore L. Thomas and Kate Wilhelm, about a monstrous, out-of-control cell mass.

Corcos, Christine; Corcos, Isabel; and Stockhoff, Brian. **Double-Take: A Second Look at Cloning, Science Fiction and Law**. *Louisiana Law Review* 59 (4): 1041-99, Summer 1999.

In this comprehensive essay, the authors note parallels between cloning (and genetic manipulation) in science fiction and the social and legal responses. They discuss fear of both clones and aliens, media portrayal of clonal reproduction of human life, and images of the mad scientist and the sorcerer's apprentice. They acknowledge that certain procedures, although objectionable to many, may be necessary and permissible for the welfare of a

few. They conclude that for society to end a line of scientific research and limit human curiosity would create another kind of world, one like *Pleasantville* or *1984*, instead of *Brave New World*. Three appendixes of science fiction are grouped by film, fiction, and young adult fiction.

Dann, Jack, and Dozois, Gardner, eds. *Clones*. New York: Ace Books, 1998. 254 p.

This collection of nine previously published short stories includes "Nine Lives" by Ursula Le Guin and "Where Late the Sweet Birds Sang" by Kate Wilhelm, along with a list of short stories and novels for further reading.

Darnton, John. *The Experiment*. New York: Dutton, 1999. 421 p.

Darnton, another reporter writing a biomedical thriller, reflects an accurate scientific view of cloning, transplants, longevity, and cell senescence, along with ethical considerations.

Nussbaum, Martha C., and Sunstein, Cass R., eds. *Clones and Clones: Facts and Fantasies About Human Cloning*. New York: W. W. Norton, 1998. 351 p.

The fifth part of this book on "Fiction and Fantasy" portrays clones through the first person as well as through the third. Most disturbing is the first piece, a short story called "World of Strangers" by Lisa Tuttle. Tuttle touches on reproductive cloning without knowledge, and thus consent, of the genetic parent. Her story ends with the ultimate in narcissism and incest, a sexual relationship between father and his unconsented to cloned son, leading one to consider sexual slavery and the ownership of a clone.

Ribalow, M. Z. **Take Two: Have Movies About Cloning Prepared Us for the Real Thing?** *The Sciences* 37 (5): 38-41, September/October 1997.

Ribalow reviews movies about clones, starting in 1926 with *Metropolis*, directed by Fritz Lang, and ending 70 years later with *Multiplicity* in 1996. Two cloning movies date from 1978, the well known *The Boys From Brazil*, about Hitler clones, and the lesser known B movie directed by Robert S. Fiveson, *The Clonus Horror*, about government kidnapping

to create clones to supply body parts.

Weldon, Faye. **The Cloning of Joanna May**.  
London: Fontana/Collins, c1989, 1990. 351 p.

Cloned by her ex-husband and gynecologist without her knowledge, Joanna May discovers four thirty-year-old women, Jane, Gina, Julie, and Alice, each her exact genetic copy. Previously unaware of one another's existence, the women have pursued different lifestyles and different interests. The novel explores the influence of nurture versus nature.

*This Scope Note was prepared by Laura Jane Bishop, Ph.D., Research Associate, and Susan Cartier Poland, J.D., Legal Research Associate, at the National Reference Center for Bioethics Literature, Kennedy Institute of Ethics, Georgetown University, Box 571212, Washington, DC 20057-1212.*

The National Reference Center for Bioethics Literature, Kennedy Institute of Ethics, Georgetown University, operates on Contract N01 LM73529 from the National Library of Medicine, National Institutes of Health. Additional support is provided by Grant P4 1 HG01115 from the ELSI Branch, National Human Genome Research Institute, National Institutes of Health, and by other public and private sources.

© December 2002

## SCOPE NOTE SERIES

The SCOPE NOTE Series is intended to present a current overview of issues and viewpoints related to specific topics in biomedical ethics. It is not designed as a comprehensive review, but rather offers immediate reference to facts, opinion, and legal precedents (if applicable) for scholars, journalists, medical and legal practitioners, students, and interested laypersons.

All sources cited in SCOPE NOTES are included in the collection of the National Reference Center for Bioethics Literature (NRC), and may be obtained through its document delivery service (subject to copyright law). Updates of topics covered in SCOPE NOTES may be obtained by searching the BIOETHICSLINE® database (accessed through June 2001 via the National Library of Medicine's MEDLARS system), or by calling the NRC.

Please note that, as of SCOPE NOTE 15, the series appears in the *Kennedy Institute of Ethics Journal* (\*KIEJ). The series continues to be published separately as reprints. Price: \$5.00/issue; \$8.00/issue overseas. Order from: Scope Notes, Kennedy Institute of Ethics, Box 571212, Georgetown University, Washington, DC 20057-1212; Telephone: 888-BIO-ETHX (toll-free) or 202-687-3885; fax 202-687-6770. Series editor: Doris Mueller Goldstein, Director of Library and Information Services.

1. Dangerousness. 9/82. 5 p.
2. Living Wills. Rev. 4/92. 19 p.
3. Ethics Committees. \*KIEJ. Repr. 9/92. 17 p.
4. DRGs. 6/84. 11 p.
5. Baby Fae (Xenografting). 1/85. 19 p.
6. Surrogate Motherhood. Rev. 1/88. 11 p.
7. Withholding or Withdrawing Nutrition or Hydration. Rev. 3/92. 17 p.
8. AIDS (with 1991 update). 4/88. 28 p.
9. Bioethics Audiovisuals. 9/88. 12 p.
10. In Vitro Fertilization. 12/88. 12 p.
11. Neonatal Intensive Care. 5/89. 10 p.
12. Anencephalic Infants/Organs. 6/89. 11 p.
13. The Aged and Resource Allocation. 1/90. 13 p.
14. Maternal-Fetal Conflict. 8/90. 14 p.
15. Basic Resources. \*KIEJ. Repr. 9/91. 14 p.
16. Teaching Ethics/Health. \*KIEJ. Repr. 9/91. 19 p.
17. Human Genome Project. \*KIEJ. Repr. 11/91. 11 p.
18. Active Euthanasia/Assisted Suicide. \*KIEJ. Repr. 3/92. 17 p.
19. Nursing Ethics. \*KIEJ. Repr. 6/92. 18 p.
20. Right to Health Care. \*KIEJ. Repr. 1/93. 13 p.
21. Fetal Tissue Research. \*KIEJ. Repr. 3/93. 15 p.
22. Genetic Testing/Screening. \*KIEJ. Repr. 9/93. 17 p.
23. Bioethics Consultation. \*KIEJ. Repr. 1/94. 15 p.
24. Human Gene Therapy. \*KIEJ. Repr. 3/94. 15 p.
25. Religion/Bioethics: Pt. I. \*KIEJ. Repr. 6/94. 23 p.
26. Religion/Bioethics: Pt. II. \*KIEJ. Repr. 12/94. 24 p.
27. Gender Issues/Health Care. \*KIEJ. Repr. 3/95. 14 p.
28. Eugenics. \*KIEJ. Repr. 6/95. 11 p.
29. Organ Transplant Allocation. \*KIEJ. Repr. 1/96.
30. Feminist Perspectives in Bioethics. \*KIEJ. Repr. 4/96. 13 p.
31. Managed Health Care. \*KIEJ. Repr. 6/96. 12 p.
32. A Just Share: Justice and Fairness in Resource Allocation. \*KIEJ. Repr. 8/97. 13 p.
33. Landmark Legal Cases in Bioethics. \*KIEJ. Repr. 8/97. 14 p.
34. Bioethics Commissions. \*KIEJ. Repr. 5/98. 15 p.
35. Public Health Ethics. \*KIEJ. Repr. 10/98. 14 p.
36. Organizational Ethics and Health Care. \*KIEJ. Repr. 14 p.
37. Basic Resources in Bioethics, 1996-1999. \*KIEJ. Repr. forthcoming.
38. Bioethics Resources on the Web. \*KIEJ. Repr. forthcoming.
39. Genes, Patents, and Bioethics. \*KIEJ. Repr. 4/01. 14 p.
40. Animals in Research and Education. \*KIEJ. Repr. 3/01. 19 p.
41. Bioethics and Cloning, Part I. KIEJ. Reprinted with Bioethics and Cloning, Part II, March 2003 as a special double-issue Scope Note. 59 p.
42. Bioethics and Cloning, Part II. KIEJ. Reprinted with Bioethics and Cloning, Part I, March 2003 as a special double-issue Scope Note. 59 p.
43. Incentives for Providing Organs. KIEJ. March 2003. 12 p.
44. Vulnerability, Vulnerable Populations, and Policy. KIEJ December 2004. 15 p.
45. Bioethics, Biolaw, and Western Legal Heritage. KIEJ June 2005. 8 p.

*For more information about Library and Information Services at the Kennedy Institute of Ethics  
visit*

*<http://bioethics.georgetown.edu>*