

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

Collection/Record Group: Clinton Presidential Records

Subgroup/Office of Origin: Public Liaison

Series/Staff Member: Maureen Shea

Subseries:

OA/ID Number: 20944

FolderID:

Folder Title:

Cloning

Stack:

S

Row:

29

Section:

2

Shelf:

11

Position:

3

EXECUTIVE OFFICE OF THE PRESIDENT
LIBRARY
OLD EXECUTIVE OFFICE BUILDING

Room 308

x57000

TO: Maureen

ROOM: _____ DATE: 4/15

☒ Per Your Request

☐ FYI

Comments:

CLOSING - IF THERE
IS ONE - IF NOT,
WE NEED

From: Melinda

EOP LIBRARIANS--YOUR INFORMATION PARTNERS

FOCUS - 1 OF 1 STORY

Copyright 1999 The Washington Post
The Washington Post

June 14, 1999, Monday, Final Edition

SECTION: A SECTION; Pg. A01

LENGTH: 1734 words

HEADLINE: Embryo Work Raises Specter Of Human Harvesting; Medical Research Teams Draw Closer to Cloning

BYLINE: Rick Weiss, Washington Post Staff Writer

BODY:

A team of American researchers has quietly begun trying to create the world's first batches of cloned human embryos, and another team has resumed its controversial cloning of embryos that are part human and part cow, according to scientists involved in the work.

The privately funded work is part of a new surge of human embryo research aimed at developing novel treatments for diseases -- but which some scientists believe could be inadvertently paving the way to the first births of cloned babies.

The work is also a vivid reminder that while Congress, the National Institutes of Health and a presidentially appointed bioethics commission debate the finer points of whether federal dollars should be spent on certain types of human embryo research, the private sector is rapidly moving forward to capitalize on the potentially lucrative field.

The two companies that have started the programs to grow their own embryos, Geron Corp. of Menlo Park, Calif., and Advanced Cell Therapeutics (ACT) of Worcester, Mass., are not trying to make full-grown human clones or human-cow hybrids. Rather, the goal is to use the newly cloned embryos as sources of embryonic stem cells, a recently discovered kind of cell that is thought to have the potential to treat a host of chronic ailments, including diabetes and Parkinson's disease.

Nonetheless, the two programs are the first openly concerted efforts to create human embryos by cloning. They also appear to be the first instances of scientists creating human embryos explicitly for the purpose of harvesting medically useful cells -- a practice that President Clinton banned among federally funded researchers 4 1/2 years ago but that remains legal in the private sector.

Adding to the contentious nature of the work is the widely held suspicion that the new experiments will inevitably, and perhaps very quickly, help others overcome the remaining technical hurdles to cloning human beings. After all,



LEXIS·NEXIS[®]
A member of the Reed Elsevier plc group



LEXIS·NEXIS[®]
A member of the Reed Elsevier plc group



LEXIS·NEXIS[®]
A member of the Reed Elsevier plc group

once someone perfects the art of making healthy cloned human embryos as a source of stem cells, all that would be needed to make the world's first human clone would be to place one of those embryos in a woman's womb so she could give birth to the resulting child.

That uncomfortable link between stem cell research and human cloning is raising difficult questions about how to draw legal and ethical distinctions between cloning young human embryos -- essentially balls of a few hundred cells -- for medical research, and cloning human beings as a reproductive alternative.

For those who believe that life begins around the time of conception, and that even very young embryos deserve special respect and protection, the cultivation of embryos to harvest their cells is beyond the ethical pale, said George Annas, a bioethicist and professor of health law at Boston University.

"They can make the argument that really what they're doing is just culturing stem cells," Annas said. "It's an argument, but it won't fly with a lot of people."

But for those who believe, as many scientists do, that an embryo does not become a person until it is at least 14 days old, when the first evidence of a nervous system appears, experimentation on five- to 10-day-old human embryos for stem cells is a worthy endeavor.

"I think people don't realize that we're talking about cells that have not become anything yet. There's no hands and feet, and I think a lot of this debate is over mental images that words like 'embryo' portray," said Michael West, president of ACT. "To prevent science from using cells to cure human diseases would be a horrific step backward."

West said American regulators and the public need to catch up with their European counterparts, who have begun making a distinction between "therapeutic cloning," in which embryos are cloned for their valuable cells, and "reproductive cloning," in which those cloned embryos are actually grown into babies. Therapeutic cloning may be ethically acceptable, he said, even as it remains medically unsound and ethically questionable to clone human beings.

In the United States, however, regulatory efforts relevant to human embryo research and cloning have not attained that level of subtle distinction. Caught between the desire not to support anything resembling abortion and an equally strong desire not to interfere with medical research, Congress has repeatedly failed to muster the votes necessary to pass legislation relating to cloning in the private sector. A congressional battle is also expected this fall over the extent to which federal funds should be used to study human embryonic stem cells.

To some extent, Congress has had the luxury of complacency because cloning techniques are still young and unreliable. A recent study involving Dolly the sheep found that the famous clone's chromosomes appear worrisomely older than their chronological age. Other studies have documented a number of other abnormalities in some cloned animals. Clearly, scientists say, improvements need to be made before cloning can be tried as a means of human reproduction.

But cloning technology has become irresistibly attractive to stem cell



LEXIS·NEXIS®

A member of the Reed Elsevier plc group



LEXIS·NEXIS®

A member of the Reed Elsevier plc group



LEXIS·NEXIS®

A member of the Reed Elsevier plc group

researchers who want to replace failing tissues in patients. That's because stem cell transplants would probably be rejected if they came from unrelated, leftover embryos from fertility clinics -- the current source of human embryonic stem cells. So researchers want to clone their patients -- not with the intent of raising fully grown duplicates, but to grow genetically identical embryos whose stem cells could be harvested for transplantation.

That's what scientists supported by Geron and ACT are hoping to do. The approach is controversial because it involves the creation of human embryos that would otherwise never have been formed, with the express purpose of destroying them to harvest their cells. Religious leaders from several denominations have spoken out against the practice, as have members of President Clinton's National Bioethics Advisory Commission and others.

The Geron research involves taking genetic material from a human cell, such as a skin cell, and inserting it into a human egg whose own DNA has been removed. Under the proper conditions, that newly created entity will start dividing as if it were a young embryo genetically identical to that of the person (in practice, the patient) who donated the original skin cell.

Geron's chief scientific officer, Calvin Harley, said that in the long run the company hopes to learn how to derive stem cells from sources other than embryos. However, he said, "we don't know how long it's going to take to be able to do this in a system without eggs." So for now, he said, the company will work on human cloned embryos.

The work is not going on at Geron's headquarters in California but in the laboratory of a scientist who is funded by Geron, Harley said. He would not say who or where that was or how advanced the work was.

ACT's approach to making embryos is a little different from Geron's. Researchers there are taking cells from people and fusing them with cows' eggs, which are easier to obtain than human eggs.

The company first tried the method in 1995, using a skin cell taken from a researcher's mouth and a cow's egg whose own genes had been removed. The work drew controversy when it was made public last year, in part because of the possibility that a few bovine genes may remain in the eggs, creating cross-species genetic hybrids that many found conceptually repulsive.

West, ACT's president, told a congressional committee last year that the company had suspended the research pending more public discussion about the ethics of the work. But he and Jose Cibelli, the company's director of cell biology, said in recent interviews they have now resumed the work.

"We don't let [the embryos] go beyond, I'd say, 10 or 12 days before we destroy them," Cibelli said. He said the human cells had been donated by adults who had given consent for their cells to be used in the research. "We're looking at what are the best cell types to use" to make healthy embryos, he said, "and we're trying to improve the efficiency."

It's that improved efficiency that worries people who are opposed to human cloning. If progress in the field continues apace, some experts said -- and if a sufficiently bold doctor proves willing to place a cloned human embryo into a

**LEXIS·NEXIS®**

A member of the Reed Elsevier plc group

**LEXIS·NEXIS®**

A member of the Reed Elsevier plc group

**LEXIS·NEXIS®**

A member of the Reed Elsevier plc group

woman's womb -- then the first human clone could be born very soon, perhaps within the next two years.

But scientists at Geron and ACT said the potential benefits of the work outweigh that theoretical concern.

"It's true of all technologies that are useful for humankind that they can be turned toward unethical applications," Harley said. "It's the responsibility of society to understand the technology and make sure appropriate safeguards are in place."

Cibelli of ACT said he hoped that the prospect of widespread public opprobrium would prevent scientists from applying their findings to the cloning of human beings.

"There's too much of a controversy over human cloning to put your job on the line," Cibelli said.

"Then again," he added, "the human mind is complicated."

Background

Cloning Milestones

1997

Feb. 24: Scottish researchers clone an adult mammal for the first time, resulting in the birth of Dolly the lamb.

March 5: President Clinton bans federal funding of human cloning research.

1998

Jan. 21: Texas researchers clone genetically engineered calves, with the hope of eventually developing herds with medicinal milk.

July 23: In Hawaii, scientists create dozens of cloned mice, the first documented cloning of adult mammals since Dolly.

Aug. 20: New Zealand scientists say they cloned the surviving member of a rare breed of cow.

Nov. 13: A Massachusetts biotechnology firm claims to have created an embryo from human and cow cells using cloning techniques.

Dec. 9: Japanese scientists clone several calves from a single adult cow.

1999

Jan. 29: Oregon researchers report repeated unsuccessful attempts to clone monkeys, suggesting difficulties in human cloning.

May 27: Scientists report that Dolly's cells inherited the age of the 6-year-old ewe from whom she was cloned.



LEXIS·NEXIS®
A member of the Reed Elsevier plc group



LEXIS·NEXIS®
A member of the Reed Elsevier plc group



LEXIS·NEXIS®
A member of the Reed Elsevier plc group

Cloned calves in Texas. Dolly the lamb. Cloned mice in Hawaii: top, donors;
bottom center, mother; bottom right and left, cloned offspring.

GRAPHIC: PH,,AP; PH,,REUTER; IG,,TWP

LANGUAGE: ENGLISH

LOAD-DATE: June 14, 1999



LEXIS·NEXIS®
A member of the Reed Elsevier plc group



LEXIS·NEXIS®
A member of the Reed Elsevier plc group



LEXIS·NEXIS®
A member of the Reed Elsevier plc group



JAY LINTNER <lintnerj @ ucc.org>
03/26/98 01:10:43 PM

Record Type: Record

To: Maureen T. Shea/WHO/EOP
cc:
Subject: Cloning

This is being sent to full House and Senate Friday or Monday. PR release now being prepared.

March 27, 1998

Dear Senator:
Dear Representative:

The United Church Board for Homeland Ministries and the United Church of Christ Office for Church in Society supports a moratorium on human cloning for reproductive purposes. But we are opposed to a ban on nonreproductive uses in research and medicine. As Christians we believe that science and medicine should be used for the sake of those who are sick and suffering, and that research toward that end should receive our support. Therefore we are open to consider the scientific and medical benefits that might come from nonreproductive human cloning.

For more than two decades, the United Church of Christ has watched the field of genetics research with great interest. A 1977 study booklet on "Genetic Manipulation" is believed to be the first such study produced by a Christian denomination. Our 1989 Pronouncement on "The Church and Genetic Engineering," overwhelmingly passed by the General Synod, summarizes the stance of the UCC to this field of research: "Genetic engineering opens new ways for people of compassion to help those in need. With caution and yet with great hopefulness, we welcome its development, pledging to support a climate of thoughtful reflection, public awareness, appropriate regulation and justice in distribution."

This Pronouncement explicitly leaves open the possibility of such applications as human germ-line gene transfer: "We are far more cautious at present about procedures that would make genetic changes which humans would transmit to their offspring (germline therapy)....We urge extensive public discussion and, as appropriate, the development of federal guidelines during the period when germline therapy becomes feasible."

Currently, the United Church of Christ has an active ad hoc Committee on Genetics. In response to the birth of Dolly the cloned sheep, this Committee on Genetics issued a statement calling for opposition to reproductive uses of human cloning but leaving open nonreproductive uses for

reproductive uses, the Committee states: "We support legislation to ban cloning for reproductive purposes, at least for the foreseeable future."
[The full text of this statement is available at www.ucc.org.]

But in regard to nonreproductive uses, the United Church of Christ Committee states: We "do not object categorically to human pre-embryo research, including research that produces and studies cloned human pre-embryos through the 14th day of fetal development, provided the research is well-justified in terms of its objectives, that the research protocols show proper respect for the pre-embryos, and that they not be implanted." Such research should be subject to public review and support. The Committee statement acknowledges that through this research, "scientists could learn a great deal about basic human developmental biology and that this knowledge might someday lead to treatments for degenerative conditions or to counteract some forms of sterility."

This position is rooted in the 1989 Pronouncement, specifically in the statement about human germ-line gene transfer. In both cases, whether germ-line research or nonreproductive human cloning, the United Church of Christ is open to the possibility of human embryo research and its medical application.

On the basis of these documents, we urge the passage of a legislative moratorium on any use of somatic cell nuclear transfer for human reproductive purposes for a period of at least ten years. We call upon scientists, government leaders, the religious communities, and the general public to come together in discussion during the period of the moratorium on the question of the moral acceptability of reproductive cloning. Pending the outcome of that discussion, a permanent ban may be enacted, or some forms of reproductive cloning might be allowed, once issues of safety and appropriate regulation have been resolved.

However, we urge that any moratorium on human reproductive be carefully crafted so as not to interfere with other forms of genetics research, which has our broad support. Furthermore, we do not support a ban on nonreproductive uses of human cloning, believing that a strong case might be made that this research will lead to fundamental developments in science and to promising applications in medicine. If this research is undertaken, we believe it must be done with prior public discussion and in a climate of general public support. Furthermore, research procedures must safeguard a laboratory environment of moral respect for the human embryo as a research object.

The Rev. Tom Dipko, Executive Vice President, United Church Board for Homeland Ministries

The Rev. Wallace Ryan Kuroiwa, Executive Director, UCC Office for Church in Society

The Rev. Ron Cole-Turner, Chair, UCC Committee on Genetics