Legislation of Human Cloning in the United States

The United States scientific community dodged a bullet in the Senate earlier this year when an attempt by Senate Republican leaders to ban human cloning failed.

The bill’s sponsors, Sen Christopher S. Bond, R-Mo, and Sen Bill Frist, R-Tenn, wanted to send the bill directly to a vote, avoiding the usual procedure of sending the legislation to a committee for study and possible hearings. Republicans and Democrats joined to prevent the action.

But the bill itself would have banned what it called human “somatic cell nuclear transfer,” the procedure that resulted in the cloned sheep, Dolly, in Scotland last year.

An opposing bill sponsored by Sen Dianne Feinstein, D-Calif, and Sen Edward Kennedy, D-Mass, would allow laboratory work but for the next 10 years would prevent transfer of a cloned embryo to a woman’s uterus.

Matthew P. Scott, PhD, found himself in the middle of controversy earlier this year when he was asked to review both bills in his role as President of the Society of Experimental Biology. “Who would dream that this obscure society would be drawn into the debate over legislation on human cloning?” he said during a conversation with medical students earlier this year.

He called the Republican-sponsored bill “chilling,” not only because it was a total ban but because it also called for criminal penalties for those who violated it. He called the Feinstein-Kennedy bill “acceptable.”

But he called the concern over human cloning overblown at this point. “You don’t have to deal with the ethical issues,” he said. “The safety ones are enough. The odds of creating an extremely damaged child are very high,” he said. Yet the controversy over cloning arose again when a Chicago physicist, Richard Seed, said he was attempting to set up a cloning lab in an effort to produce children for infertile couples.

“It is unfortunate when legislators get into these things,” said Dr Scott. But perhaps that is inevitable, and he said scientists must voice support for laws that would allow research to continue without violating national mores.

The Association for American Medical Colleges (AAMC) called for a voluntary moratorium on cloning of human beings as an alternative to legislation that might impede scientific progress. In a press conference, Herbert Pardes, MD, dean of Columbia University College of Physicians and Surgeons, said the AAMC also supported the US Food and Drug Administration’s assertion that it could regulate human cloning.

Voluntary moratoriums have worked in the past. In the 1970s, the scientific community itself declared a moratorium on new research into genetic engineering. The scientific community adopted guidelines that would ensure safety, and work proceeded within those parameters.

The Federation of American Societies for Experimental Biology has announced adoption of a voluntary 5-year ban on cloning human beings. The society proposes revisiting the moratorium after the 5-year period with the possibility that it could be extended.

The birth of Dolly generated a wealth of controversy. President Clinton quickly instituted a ban on federal funding for human cloning attempts. The President also asked the National Bioethics Advisory Commission to study cloning and issue a report. In its report, the commission wrote, “at this time, it is morally unacceptable for anyone in the public or private sector . . . to attempt to create a child using somatic cell nuclear transfer cloning.”

The commission said the risks to fetus and mother were unknown and unacceptable and recommended legislation “to prohibit anyone from attempting, whether in a research or clinical setting, to create a child through somatic cell nuclear cloning.

“It is critical, however, that such legislation include a sunset clause to ensure that Congress will review the issue after a specified period of time . . . and that any legislation should be carefully written so as not to interfere with other important areas of scientific research.”

John B. Gurdon, DPhil, performed pioneering work in frogs that laid the groundwork for the cloning of Dolly. “The Dolly experiment was not primarily designed to excite all these anxieties. You can’t clone Ross Perot.”

He pointed out that such experiments are fraught with peril. “The great majority of these experiments produce abnormal embryos,” he said. In the United Kingdom, he said, human cloning would have to undergo rigorous review by licensing authorities. He predicted that if someone wanted to clone a human, the licensing authority would find no good reason to do so.

“I would regret any legislation that would say you can’t do experiments with human material,” Dr Gurdon said.

Ruth SoRelle
Circulation Newswriter
Legislation of Human Cloning in the United States
Ruth SoRelle

Circulation. 1998;97:1889
doi: 10.1161/01.CIR.97.19.1889

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 1998 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the
World Wide Web at:
http://circ.ahajournals.org/content/97/19/1889

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published
in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial
Office. Once the online version of the published article for which permission is being requested is located,
click Request Permissions in the middle column of the Web page under Services. Further information about
this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/