

## **Crafting a Cloning Policy: From Dolly to Stem Cells**

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Throughout history, the world of science has altered humankind's general perception of morality and ethics. The Copernican system, the theory of evolution, and the discovery of DNA are just a few examples of scientific breakthroughs that have changed the way we think about ourselves. Somatic cell nuclear transfer, more popularly known as cloning, is perhaps the most controversial breakthrough the world has ever seen. In her book, *Crafting a Cloning Policy: From Dolly to Stem Cells*, author Andrea L. Bonnicksen tackles the myriad problems surrounding the issues of cloning and human embryonic stem cells. Approaching the issue from a policy perspective, Bonnicksen examines the actions of those entities in the position to create and enforce an ethically acceptable cloning policy. Specifically, Bonnicksen analyzes the efforts of various legislative, regulatory, and judicial bodies to craft underlying rules and regulations that reflect a cloning and stem cell policy that is consistent between the relevant governmental bodies and the majority of American people.

Bonnicksen first analyzes the reaction to the 1996 birth of a cloned lamb named Dolly. While statistics in America showed that most people disagreed with cloning from an ethical and religious standpoint, Bonnicksen observes that technology and science are generally regarded optimistically in America, and that limitations on scientific research conflict with our belief that the benefits of science often outweigh the costs of such research. Thus, despite the moral issues underlying cloning research, many acknowledge the fact that controversial research is necessary for advancing scientific knowledge and using such knowledge to benefit humankind.

This notion, however, may not apply when discussing cloning techniques as applied to embryonic stem cells. The difficulty lies in the fact that people disagree as to what status a human embryo should be given. Some view human embryos as sharing the same rights as children, so that their creation and manipulation is essentially an immoral act. Others believe that a human embryo is merely a cell with developmental potential, and that conception is a process rather than an event. Bonnicksen articulately sets forth the arguments for and against cloning and embryonic stem cell research to illustrate the difficulty the Federal Government has faced in formulating a broadly-accepted cloning policy.

Bonnicksen observes that a policy on cloning and stem cells can be created through several approaches: narrow legislation, broad legislation, or regulatory administration. Tracking congressional and executive action between 1997 and 2000, Bonnicksen describes the first steps taken by the Clinton Administration. The National Bioethics Advisory Commission was responsible for creating a report on the ethical and moral issues surrounding cloning. Furthermore, President Clinton refused to allow federal agencies to financially support efforts towards additional cloning experiments. In Congress, there was a multitude of congressional hearings, and several bills, although not enacted, were introduced during the Clinton administration.

Through 1998 and 1999, the government still did not have a firm position on cloning or stem cell research. While the cloning of humans was still an issue, the most prevalent debate regarded stem cell research, as the issue became more political. Conservative groups argued that embryos, like fetuses, possessed life, and therefore could not be utilized to save others. Pointing to the vast benefits stem cell research would have

on combating certain diseases, other groups advocated the furtherance of scientific experiments in this field.

Bonnicksen goes on to describe in detail how the Food and Drug Administration, various state and federal courts, state legislatures, and other countries have responded to cloning and stem cell research. Particularly interesting was the author's discussion of the constitutional implications surrounding the issues, and how the Supreme Court would treat a prospective lawsuit if the Federal Government were to proscribe stem cell research. Would the issue be couched in terms of the right to privacy, implicating the body of "right to privacy" cases decided in the past thirty years? Or would it take some other approach?

*Crafting a Cloning Policy: From Dolly to Stem Cells* is a highly informative and detailed book. Bonnicksen painstakingly outlines the legislative, administrative, and judicial history of the cloning and stem cell debates, all while stressing the importance of creating a policy that firmly represents the beliefs of the government and the citizens of the United States. The author maintains an objective viewpoint while describing the political debate surrounding cloning and stem cell research. Interwoven in the text are helpful statistics that illustrate the topic at hand. Also beneficial are the conclusions at the end of each chapter, which help put the various data and statistics into context.

My only criticism is that the book sometimes reads like a legislative report. While the author cannot be faulted for doing extensive research, the constant recitation of dates, data, agencies, and scientific facts makes the book somewhat dense and difficult to read. Thus, while I would not recommend the book for a casual read, I would recommend it to anyone who would like to be ultra-informed on how the government,

through its branches, creates a cloning policy. The book may not be one for the coffee table, but it is an excellent research tool and a must read for those wanting to intelligently engage in the cloning and stem cell debates.