

President George W. Bush's Announcement on Stem Cells, 9 August 2001

On 9 August 2001, US President George W. Bush gave an eleven-minute speech from his ranch in Crawford, Texas, on the ethics and fate of US federal funding for stem cell research. The speech is available at <http://georgewbush-whitehouse.archives.gov/news/releases/2001/08/20010809-2.html>. Bush also announced the creation of a special council to oversee stem cell research. In the speech President Bush acknowledged the importance of issues surrounding stem cell research to many Americans, presented different arguments in favor of and opposing embryonic stem cell research, and explained his decision to limit but not completely eliminate potential federal funding for embryonic stem cell (ESC) research. The speech was important to embryology as a field because it determined the US federal government's policy on funding human ESC research for the eight years of George W. Bush's administration.

Bush first spoke of the importance of the stem cell debate to American citizens and provided background information on embryonic stem cell research. He then outlined the central questions he said determine whether embryonic stem cell research can be done in concert with good ethics. The rest of the speech indirectly addressed these questions as the President invoked literature and traditional values, attempted to establish his empathetic credibility with those who might support embryonic stem cell research for personal reasons, and explained the compromise he had selected. Bush closed with his announcement of the creation of a presidential council to monitor stem cell research, provide guidance for himself and others, and generate thoughtful discussion among Americans in the midst of biomedical advances and ethical controversy.

The speech began with a description of stem cell research and the debate surrounding it. It pointed to ethical concerns pondered by scientists and by parents who want to help their children, or who want to have children; recognized widespread religious debate; and noted that there is disagreement even between people sharing the same faith. Bush described the current state of stem cell research by identifying the source of embryos preferred by scientists, namely excess embryos left over after couples attempt in vitro fertilization (IVF). Some of these extra embryos are frozen, he said, some implanted in mothers, and some donated to science for research.

Bush did not shrink from describing the potential benefits that research on IVF embryos might contribute, saying that preliminary research on ESCs had shown that the cells might be able to help develop treatment for juvenile diabetes, Alzheimer's disease, Parkinson's disease, and spinal cord injuries. Bush also commented that other stem cells can be taken from adult cells, umbilical cord blood, and placentas, and that patients are already receiving treatments based on stem cells from these sources. He admitted, however, that many scientists were convinced that ESCs had the most potential because of their pluripotency, their potential to develop into all of the tissues in the body.

The US, said Bush, has a history of leading the world not only in scientific advancement, but also in upholding high ethical standards, and he noted the ethical concerns associated with the destruction of genetically unique human embryos. In considering these ethical concerns, Bush continued, two key ethical questions must be addressed. First, do embryos qualify as human life, and second, if embryos are going to be destroyed anyway why shouldn't they be used for the greater good?

Bush touched on arguments on both sides of these questions, giving the final word to arguments opposed to ESC research in response to each question. Regarding the first question, he said, one scientist had told him that a five-day-old cluster is not even a real embryo, but is actually a pre-

embryo, not deserving to be called life because it cannot develop on its own. On the other hand, an ethicist with whom Bush had spoken argued that because all human life has humble beginnings, embryos deserve protection as what the ethicist referred to as the seeds of the next generation.

In terms of the second question—is it wasteful to forego research on ESCs from extra IVF embryos that are going to be destroyed otherwise?—Bush noted the opposing viewpoint, that the term “excess life” is self-contradicting, that there can be no such a thing as excess life, and therefore the embryos cannot be treated as an expendable resource for research.

While Bush’s speech provided possible answers to his questions from different perspectives, he did not personally and directly answer the questions. Rather, they are answered implicitly throughout the rest of his speech. Issues surrounding stem cell research, he said, exist at a “moral intersection” between a desire to protect human life and a desire to save and improve people’s lives. It is important to note that the desire to protect human life as cited by Bush would not be an issue if some did not think embryos qualify as a type of human life. Illustrating this desire to protect human life, Bush continued by invoking literature, claiming that we’ve already arrived at Aldous Huxley’s concept of the Brave New World in terms of our capability to create human life in test tubes, just as scientists do in the hatcheries of Huxley’s dystopian future. Bush expressed his deep discomfort with the fact that scientists have already generated embryos in test tubes for the purpose of experimenting on them.

His discussion then invoked traditional values in a more direct way to demonstrate concern for protecting life, saying that the very first stem cell researcher had been reluctant to conduct research because he feared his work would be used to clone humans. Although Bush did not identify this researcher in his talk, he was referring to James Thomson, the first researcher to extract human ESCs from an embryo and, in 1998, to create a pluripotent human stem cell culture. Bush reminded listeners that a sheep had already been cloned (Dolly the cloned sheep was born in 1997), and he speculated that scientists might try to clone extra copies of people so healthy organs and other tissues could be extracted on a whim. A majority of Americans, claimed Bush, oppose human cloning, although at no point in the speech did he directly say that ESC research would lead to cloning, or consider how it might do so.

After describing these concerns with creating life for research, President Bush examined the morality of conducting research on embryos that would be destroyed anyway. He addressed this second question indirectly by saying that “even the most noble ends do not justify any means.” Bush next attempted to establish some empathetic credibility with those who might doubt that his understanding of the potential of ESC research to ease suffering. He mentioned friends who parent children with juvenile diabetes, correspondence with Nancy Reagan detailing President Reagan’s struggle with Alzheimer’s, and the pain he felt at losing his sister to leukemia when he was seven.

These statements were intended, however, to show comprehension of the ramifications of restricting federal funding for research on embryos, not support for funding research on human embryos. Here Bush finally stated his belief that life is a “sacred gift from our Creator,” and that he feels compelled to promote protection of and respect for life. Not wanting to completely eliminate potential benefits that could arise from research, he enjoined scientists to proceed with caution. He then outlined a compromise intended to allow for scientific advances without sponsoring the crossing of ethical lines with tax dollars.

To advance research, Bush declared his intent to allow federal funding for what he claimed were more than sixty genetically diverse stem cell lines that had already been created by destroying embryos. In the interest of ethical caution, he said, he would not allow tax dollars to support the creation of new ESC lines from extra IVF embryos since it would sponsor making the “life and death decision” for an embryo with taxpayer dollars. An article in an issue of Science published the week following Bush’s speech reported a generally positive initial response to the decision, but speculated about where all sixty cell lines might be, noting that the National Institutes of Health (NIH) had probably learned about previously secret ESC lines by guaranteeing confidentiality in conversations with research groups. The article also mentions looser guidelines relating to informed consent, an issue that later became a topic of debate as some scientists argued that due to a lack of informed consent, researchers could not ethically work with the stem cell lines Bush had approved

for research.

The speech closed with a declaration of his belief that research on stem cells taken from umbilical cords, placentas, adult stem cells, and animal stem cells could produce useful results. He pledged \$250 million to such research and then promised to create a council to monitor stem cell research, examine ethical issues surrounding scientific innovation, and recommend ethical research guidelines. The council became the President's Council on Bioethics. The first chair, Leon Kass, was chosen by President Bush and led the council until 2005. In that time Kass oversaw the publication of a document on monitoring stem cell research as well as the release of a white paper, "Alternative Sources of Human Pluripotent Stem Cells."

Bush's decision to limit federal funding that might have been used by scientists to study ESCs derived from extra IVF embryos was highly controversial. It was also praised in different circles for placating the ethical concerns of many while still offering scientists avenues for research. Many of Bush's reasons for opposing human ESC research seemed to originate in literature, history, personal convictions, and consideration of the opinion of some American citizens. Because of this, recent advances in ESC research have not explicitly debunked his arguments, nor are they likely to do so, due to the nature of his rhetoric. However, the ethical legitimacy of the sixty lines he did approve for research sponsored by federal funding has since been questioned because of issues relating to informed consent, primarily involving whether the biological parents of the IVF embryos in question knew that their embryos had been taken for research purposes.

The appointment of Kass, who had once opposed even in vitro fertilization and remains an outspoken critic of human cloning and unrestricted research on embryos, to lead the President's Council on Bioethics was also seen as an unfair decision by many scientists and political commentators. However, Bush stuck to his decision, which was overshadowed a month later by the attack on the World Trade Center on 11 September 2001. It was overturned by next US president, Barack Obama, on 9 March 2009, when—while emphasizing that he still opposed human cloning—Obama officially removed the restrictions placed by President Bush on federal funding for research on embryos.

Sources

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