

## Myth/Fact

# The President's Stem Cell Research Policy

### Impact Of The President's Policy On Research

**MYTH:** The President's Policy Prohibits Or Restricts Embryonic Stem Cell Research.

- **FACT:** **President Bush Is The First President Ever To Fund Embryonic Stem Cell Research.** Since 2001, nearly \$3 billion in funding from the National Institutes of Health (NIH) has been invested in all forms of stem cell research. Of this amount, more than \$90 million has been devoted to research on approved human embryonic stem cell lines.
- **FACT:** **President Bush's Policy Made Federal Funding Available For Embryonic Stem Cell Research On Lines Created Before August 9, 2001.** This permitted Federal funding to support basic research without using taxpayer dollars to encourage the destruction of human embryos.
- **FACT:** **The President's Embryonic Stem Cell Funding Policy Serves Both Science And Ethics.** The policy advances stem cell science without supporting or encouraging the destruction of nascent human life.
- **FACT:** **There Are No Restrictions On The Kinds Of Experiments That Scientists May Do Using Federal Funds On Eligible Embryonic Stem Cell Research Lines.** The President's policy does not prohibit any embryonic stem cell research.
- **FACT:** **There Is No Cap On The Dollar Amount Of Federal Support That Embryonic Stem Cell Research On Eligible Lines May Receive.** Applications are considered by the NIH, which uses a peer-review process to identify funding recipients.
- **FACT:** **85 Percent Of Publications On Human Embryonic Stem Cell Research Involved The Use Of Lines Approved For Funding By NIH.** (Jason Owen-Smith and Jennifer McCormick, "An International Gap In Human ES Cell Research," *Nature Biotechnology*, April 2006)
  - The vast majority of this work has been done in the past five years during the President's time in office.
  - This is far more than the research that has actually been funded by NIH, which means these lines are being used because they are useful, stable, and reliable – not just because they are eligible for funding.
- **FACT:** **There Is Significant Federal Support For Research Using Non-Embryonic Stem Cells.** Non-embryonic stem cells are derived in ethically uncontroversial ways from adults, children, and umbilical cord blood.
- **FACT:** **The President's Funding Policy Does Not Affect Privately-Funded Research.**
- **FACT:** **Every Living Human Being Was Once An Embryo Exactly Like The Human Embryos Supporters Of H.R. 810 Want To Use Federal Funding To Destroy.**

## Benefits Of Stem Cell Research

**MYTH: H.R. 810 "Would Help 100 Million Americans And Their Families."** (Rep. Diana DeGette, "President Refuses To Meet On Embryonic Stem Cells," Press Release, 7/11/06)

- **FACT: Supporters Of H.R. 810 Are Vastly Exaggerating The State Of Embryonic Stem Cell Science.** The research to date has not yielded a single therapy. There has never even been a human clinical trial using embryonic stem cells. Offering false hope is not a responsible foundation for public policy.
- **FACT: Scientists Have Dismissed The Claims Of Cures For Millions As Unfounded.** REP. MARK SOUDER (R-IN): "A common figure tossed around regarding the 'promise' of embryonic stem cell research is that it can provide cures for 100 million people. Is there any scientific evidence to actually support that claim?" NIH STEM CELL TASK FORCE CHAIR DR. JAMES BATTEY: "It is unclear where this statistic came from. Human embryonic stem cell research is a relatively new field of science, having been first reported by James Thomson at the University of Wisconsin in 1998. More basic research needs to be conducted in the laboratory before the full potential for treating diseases is clear." (Dr. James F. Battey and Rep. Mark Souder, Questions For The Record Following March 6, 2006 Hearing, Committee On Government Reform, Subcommittee On Criminal Justice, Drug Policy And Human Resources, U.S. House Of Representatives, Available At: <http://reform.house.gov/UploadedFiles/Battey%20response.pdf>)

## Public Opinion

**MYTH: The President's Veto Is "Part Of Karl Rove's Cynical Electoral Strategy."** (Rep. Diana DeGette, "President Refuses To Meet On Embryonic Stem Cells," Press Release, 7/11/06)

- **FACT: The President's Policy Is Based On Principle, Not Public Opinion Polling.** The President's stem cell policy is rooted in the fact that human embryos are developing human lives and on the core ethical principle that no human life should be taken for the benefit of another. The President does not believe taxpayers should fund research presenting such ethical problems.

## Discarded Human Embryos

**MYTH: "Embryos Are Already Discarded From Fertility Clinics. Scientists Merely Want The Opportunity To See If Cures Can Be Found From The Microscopic Blastocysts That Will Never Be Brought To Life."** (Editorial, "Don't Veto Stem Cells' Potential Cures," *Detroit Free Press*, 7/12/06)

- **FACT: Being Unwanted Does Not Mean An Embryo Is Not A Human Life.** The fact that human embryos may be unwanted does not eliminate the ethical issues associated with taxpayer funding for projects that destroy human embryos for research.
- **FACT: The President Believes All Human Lives Have Worth.** The President strongly opposes using taxpayer money to enact the view that only certain human lives have worth.
- **FACT: The Question Is Whether Taxpayer Dollars Should Support The Destruction Of Nascent Human Life.** Whether human embryos are destroyed at their parents' request or for use in research

does not change the underlying ethical issue. For the first time in American history, H.R. 810 would compel every American taxpayer to become a supporter of research that destroys human embryos.

### Contamination Of Existing Lines

**MYTH: Many Of The Existing Stem Cell Lines Eligible For Research "Are Deteriorating, Contaminated Or Suffer From Technical Problems That Limit Their Usefulness."** (Editorial, "Standing Up For Stem Cell Research," *The New York Times*, 7/18/06)

- **FACT: President Bush's Stem Cell Policy Has Made Federally Funded Stem Cell Lines Widely Available To Scientists.** The NIH has sent more than 700 shipments of cells to researchers, and has thousands more available upon request.
- **FACT: 85 Percent Of Publications On Human Embryonic Stem Cell Research Involved The Use Of Lines Approved For Funding By NIH.** (Jason Owen-Smith and Jennifer McCormick, "An International Gap In Human ES Cell Research," *Nature Biotechnology*, April 2006)
  - **The Vast Majority Of This Work Has Been Done In The Past Five Years During the President's Time In Office.**
- **FACT: The Eligible Lines Are Uncontaminated And Are Very Widely Used By Researchers.** The use of mouse cells is standard scientific practice, and the resulting stem cell lines can be carefully screened to ensure they are safe for use in any future clinical trials. Drug and biological products are routinely co-cultured with animal cells with no adverse consequences for the millions of people who have benefited from them. The FDA has proven itself time and again to be fully capable of ensuring the safety and efficacy of such products.
- **FACT: Several Scientific Publications Have Now Demonstrated Techniques For Removing All Animal Materials From The Existing Cell Cultures.** This helps further alleviate concerns about animal material issues. (James Thomson et al., "Derivation Of Human Embryonic Stem Cells In Defined Conditions," *Nature Biotechnology*, February 2006)

### Brain Drain

**MYTH: "Ever Since Bush Limited Federal Funding To A Small Number Of Existing Stem-Cell Lines In August 2001 ... Top U.S. Scientists, Many Of Whom Depend On Federal Grants, Decamped To Labs In Europe Or Singapore, Where The Government Has Made Biotechnology A National Priority."** (Nancy Gibbs, Alice Park, Mike Allen, and Massimo Calabresi, "What A Bush Veto Would Mean For Stem Cells," *TIME*, 7/24/06)

- **FACT: 46 Percent Of All Human Embryonic Stem Cell Studies Published Have Been Done In American Institutions And Publications By Americans Have Increased Each Year Of This Administration.** The most recent survey of international human embryonic stem cell work, published in *Nature Biotechnology* in April 2006, shows 46 percent of all human embryonic stem cell studies since the first studies in 1998 have been done in American institutions – the other 54 percent are divided among 17 other countries. (Jason Owen-Smith and Jennifer McCormick, "An International Gap In Human ES Cell Research," *Nature Biotechnology*, April 2006)

## Embryonic Stem Cell Research Versus Alternatives

**MYTH:** Failure "To Expand Federal Support Of Embryonic Stem Cell Research" To New Lines Created By Destroying Human Embryos Has "Stall[ed] Medical Progress For Nearly Five Years."

(Editorial, "Science, Not Politics, For Stem Cells," *Los Angeles Times*, 7/18/06)

- **FACT: The Right Public Policies And The Right Scientific Techniques Can Enable Stem Cell Research To Advance Without Violating Human Dignity Or Life.** Stem cell research is a young field at a preliminary stage of development, and embryo-destructive research is not the only promising avenue.
- **FACT: Stem Cells Derived From Non-Embryonic Means Are Working.** Stem cells derived from adults, children, and umbilical cord blood with no harm to the donors (and therefore without ethical concerns) are already used in human therapies and have treated thousands of patients. These adult stem cells also show potential for further uses in basic research and clinical therapy.
- **FACT: Researchers Are Exploring Techniques For Developing The Same Kinds Of Cells Now Derived By Destroying Human Embryos Without Using Or Harming Embryos.** Such techniques are still preliminary – as is embryonic stem cell research as a whole – but significant advances have been reported in the past year. If they prove successful, these techniques could offer medical solutions without implicating serious ethical concerns.
- **FACT: Even *TIME* Magazine Says The "Science Has Outrun The Politics" And Adult Stem Cells May Be More Valuable Than Previously Thought.** "The good news for all sides is that over the course of this long argument, researchers have learned more about how stem cells work, and the science has outrun the politics. Adult cells, such as those found in bone marrow, were thought to be less valuable than embryonic cells, which are 'pluripotent' master cells that can turn into anything from a brain cell to a toenail. But adult cells may be more elastic than scientists thought, and could offer shortcuts to treatment that embryonic cells can't match." (Nancy Gibbs, Alice Park, Mike Allen, and Massimo Calabresi, "What A Bush Veto Would Mean For Stem Cells," *TIME*, 7/24/06)

## H.R. 810's "Ethical Construct"

**MYTH:** H.R. 810 Respects Ethical Concerns.

- **FACT: H.R. 810 Ignores The Most Critical Ethical Issue Addressed By The President's Policy.** The legislation allows taxpayer dollars to encourage the ongoing destruction of human embryos. The President's policy is designed to prevent this while still allowing basic research to advance.