

Moralizing stem cell research

Although most Americans support human embryonic stem cell research, the personal views of those in the White House have impeded progress.

The statistical group of the European Union (EU), Eurobarometer, recently published the second part of its investigation into EU-wide attitudes toward biotechnology. Encouragingly, the report found considerable support for human embryonic stem cell (ESC) research across Europe. That positive attitude is also reflected by EU science ministers, who have now agreed to allocate some of the EU's £37 billion science budget on ESC research. In the United States, the story is unfortunately rather more complex.

Although almost two thirds of Americans approve of expanding the use of human ESCs in research, President Bush issued the first veto of his presidency against a bill that would have significantly extended federal funding for human ESC research. That was despite the fact that the bill was passed by the House of Representatives and Senate with a large majority. According to the president, his decision was based on moral rather than scientific grounds. He stated that "this bill would support the taking of innocent human life in the hope of finding medical benefits for others" and that "it crosses a moral boundary that our decent society needs to respect." Bush's decision not only is potentially damaging for US research but also could represent a blatant disregard of the 'wall' separating church and state.

At present, federal funding can be used only for some 64 human ESC lines created before August 2001. However, many of those cell lines failed to grow in culture and some were retracted by donors, leaving only 21 lines available for use. Furthermore, Bush claimed his 2001 policy is a success, while neglecting to mention that there are many problems with those 21 lines. For example, half of the lines grow slowly, making them nearly useless, and others have accumulated genetic mutations. The vetoed bill would have allowed federal funding for research on stem cells derived from embryos destined for destruction at fertility clinics. Notably, that vetoed bill, like the present EU agreement, would not have allowed funds to be spent on generating stem cell lines from those embryos, which would still require private funding. Bush was not justified, therefore, to base his veto on the basis that taxpayers would be forced to fund the deliberate destruction of human embryos.

During his veto speech, Bush surrounded himself with young children 'adopted' as surplus frozen embryos at fertility clinics to, as he said, "remind us of what is lost when embryos are destroyed." He did not, however, emphasize that only 10% of such embryos are adopted and the rest are routinely destroyed. Neither has Bush demanded legislation to stop privately funded research centers from destroying embryos to derive new human stem cell lines. If the deliberate destruction of embryos is truly immoral, then how can the president in good conscience do nothing more than refuse to pay for it?

It seems the ethical decisions that compelled Bush to issue the veto are based on his own personal beliefs. Although everyone is entitled to their own religious beliefs, does that justify a president to force them on a majority of the American people who clearly feel the potential benefits for the treatment of Alzheimer and a host of other diseases justifies human ESC research? Even in the eyes of John Danforth, an Episcopal minister and former Republican senator, the present administration "has gone so far in adopting a sectarian agenda that it has become the political extension of a religious movement."

In several European countries, such as the United Kingdom, governments sought advice from a broad range of concerned parties to make an informed decision on ESC research. It seems a blatant error by President Bush not to do the same in the US. Other sensitive issues in the US with deep-rooted religious and political divides have managed to produce workable compromises in the past. A prime example is the law on abortion that now allows people the freedom to choose to have an abortion but does not compel people to fund them with their taxes. Of course, it can legitimately be argued that taxpayers should not be forced to fund human ESC research because they find the subject anathema. However, there are also taxpayers morally opposed to the death penalty or the war in Iraq. Is this not the very nature of a working democracy?

Conflicts between religion and science are nothing new. Medical progress has often created moral and religious objections that later subside when the benefits of the medical breakthroughs become clear. Many years ago, the Scottish Calvinist Church declared chloroform, used to alleviate the pain of childbirth, a "satanic invention," and Edward Jenner's smallpox vaccine was viewed by religious leaders as sinful and blasphemous.

Bush's decision will probably hold back US ESC research. Even though private and state funding for ESC research is expanding — for example, Maryland, New Jersey, Connecticut and California have all begun grant programs to support this area — that is no match for what federal funding can provide. As Lord Sainsbury, the UK science minister, remarked, the US is risking a 'brain drain' as scientists flock to Europe and other countries where the laws on ESC research are more liberal. The EU's decision on ESC funding, however, could produce the medical breakthroughs needed to counter the moral objections of a few in the US. That, combined with pressure from lobby groups such as Scientists and Engineers for America (<http://www.sefora.org/>), who are "dedicated to electing public officials who respect evidence and understand the importance of using scientific and engineering advice in making public policy," and the upcoming midterm elections, may help produce the 'U-turn' in government policy that is greatly needed. 