US president and Congress set to clash over stem cell research

Janice Hopkins Tanne *New York*

The US House of Representatives passed a bill last week to increase funding for research on embryonic stem cells. The research would use frozen leftover embryos voluntarily donated by couples who no longer needed them for fertility treatment.

The move challenges President George Bush, who restricted federal funding for stem cell research to lines in existence before 9 August 2001. Scientists say that few lines from before this date remain, and they may be contaminated, limiting US research (*BMJ* 2005;330:214).

The president, who has never used his veto before, has said that he would veto federal legislation to fund the destruction of embryos. He said that the bill would create incentives for the destruction of "emerging human life."

The house heard moving appeals from people whose disorders might be helped by stem cell research (including several from members of the house).

About 50 Republicans from Mr Bush's majority party crossed party lines to vote with Democrats in favour of the bill.

Conservatives, such as Tom DeLay, leader of Republicans in the house, however, consider the destruction of embryos to retrieve stem cells to be the same as killing a human being. Mr DeLay said, "An embryo is a person... We were at one time embryos... So was Abraham... Muhammad... Jesus of Nazareth."

Among those in the Senate in favour of stem cell research is Arlen Specter, a Pennsylvania Republican who is publicly undergoing treatment for lymphoma. Mr Specter told the *New York Times* that he probably has enough Senate votes to overturn a presidential veto.

The Senate will vote on the bill soon after 7 June, when it returns from the Memorial Day holiday. Michael Manganiello, senior vice president for government relations of the Christopher Reeve Paralysis Foundation, told the *BMJ*

that there was strong bipartisan Senate support for the bill.

At a White House press conference the same day as the bill was passed, the president cuddled one of several babies born after couples donated leftover

President Bush cuddles a baby born as a result of "embryo adoption"

embryos to other couples, called "embryo adoption." He encourages this as an alternative to using leftover embryos for research or destroying them.

If the bill is passed by the Senate and is vetoed by the president, his veto can be over-ruled by a two thirds vote in both the house and the Senate. Although both Republicans and Democrats have strong support, there may not be enough votes to over-rule a presidential veto in the house, but there may be in the Senate.

A presidential way out may exist, Mr Manganiello told the *BMJ*. He explained that the bill does not provide funds for destroying embryos to retrieve stem cells. That could be done with private funding and would increase by thousands the number of stem cell lines available to scientists. The bill would remove the August 2001 restriction and would provide federal funding for research on the newly increased numbers of stem cell lines. □

Exaggerated claims of cures threaten stem cell research

Kaye McIntosh *London*

Exaggerated claims for stem cell therapy are threatening a promising field of research, leading doctors in the area said this week. One company in the United States is advertising the treatment as a cure for depression and ulcerative colitis, a public debate in London heard last week.

Robin Lovell-Badge, head of the division of developmental genetics at the National Institute for Medical Research at the Medical Research Council, told the meeting, organised by the Facial Surgery Research

Foundation, "It is making claims that are totally beyond what is possible." Neil Scolding, professor of clinical neurosciences at Bristol University said, "When we hear claims about tearing up the medical textbooks, we should treat them with suspicion."

Professor Scolding warned that embryonic stem cell therapy carried a small risk of creating tumours in patients as well as of raising huge ethical issues about the destruction of human embryos. But adult stem cell therapy offered a "very exciting

prospect" of treatments in neurological and degenerative conditions and even heart disease. Clinical trials involving more than 100 patients showed clear benefits for the use of adult stem cells from bone marrow in myocardial infarction, he told the conference.

But Peter Braude, head of the department of women's health, King's College, London, told the debate that the stem cell lines his department was creating for the study of genetic disease would not be possible without using embryonic stem cells. These were the byproducts of preimplantation genetic diagnosis that would otherwise have been discarded, he said.

Ian Mackenzie, of the Institute of Cell and Molecular Science at Barts and The London,

said, "Many of the concepts about cancer stem cell behaviour have come from studies of normal stem cells and from research with embryonic and adult stem cells—so research with both kinds of stem cells is required." Stem cell research was vital for effective cancer therapy, he added: "If you eliminate the stem cells properly, the tumour will go away."

Ann McLaren, professor at the Wellcome Trust/Cancer Research UK Gurdon Institute of Cancer and Developmental Biology at Cambridge University, warned that using adult stem cell treatments before safety was proved carried "risks of infection, and failure, and disasters that could hold back the whole promising field of adult stem cell research for years." □