Stem-cell fudge finds no favour with biologists

Meredith Wadman, Washington

A compromise answer to the hot political question of whether the US government should fund research on human embryonic stem cells has received a chilly response from cell biologists.

The suggested compromise would allow government funding only for research on existing, privately derived stem-cell lines. Around a dozen such cell lines are thought to exist, half of them in the United States. The compromise was floated in the press by anonymous White House officials.

President George W. Bush is under mounting pressure from both sides of the stem-cell debate as he moves rapidly towards a decision. And with the administration and Republicans in the Congress openly split on the issue (see *Nature* **411**, 979; 2001), he might welcome a compromise.

But many researchers dismiss the value of access only to existing stem-cell lines. James Thomson of the University of Wisconsin, Madison, who first derived stem cells from human embryos (*Science* **282**, 1145–1147; 1998), calls the idea "a bad compromise" that would "in essence satisfy no one".

"Research just based on the limited number of cell lines available might be biased," says Rudolf Jaenisch, a professor of biology at the Whitehead Institute for Biomedical Research in Cambridge, Massachusetts. "You might miss some important information." Jaenisch was the senior author on a recent paper (*Science* **293**, 95–97; 2001) showing an undocumented instability in gene expression of mice cloned from embryonic stem cells.

Some researchers concede that federal funding for work on a small number of cell

lines would be better than nothing. Irving Weissman, a biologist at Stanford University in California who has worked on mouse embryonic stem cells, says that, for basic developmental-biology studies, a few lines might suffice. "A lot of good research could go on" if the lines are of excellent quality, he says.

But the political usefulness of the compromise is doubted by some observers. "It doesn't make any sense, hold any water, or gain the administration anything ethically or politically," says Tony Mazzaschi, associate vice-president for research at the Association of American Medical Colleges.

Gene Tarne, a spokesman for the Coalition of Americans for Research Ethics, a lobby group opposed to embryonic stemcell research, calls the compromise objectionable. "The stem-cell lines are derived from destroying embryos, whether that was yesterday or next week," he says.

Groups representing cell biologists say that different stem-cell lines vary in their ability to grow and differentiate, and that a dozen or so lines would be too few to promise therapies for many diseases. They also point out that several of the existing lines do not grow well in culture, rendering them impractical for research, and that the cells represent only a very narrow range of genetic variation.

Thomson, who produced five of the existing cell lines, notes that his lines were made for experimental purposes. "It's not clear that they were derived in a way that is appropriate for therapy," he says.

Another obstacle is that Geron, the California-based biotech firm that funded Thomson's research, holds an exclusive licence for the use of his cell lines in many applications.



Compromised: biologists say that using only existing embryonic stem-cell lines will constrain research.

Bush plots raid on NIH funds to finance AIDS initiative



Matthew Davis, Washington

When President George W. Bush announced in May that the United States would inject \$200 million into a global fund for fighting AIDS, malaria and tuberculosis, he boasted that the contribution would be "in addition to the billions we spend on research".

But a month later, with rather less fanfare, addition became subtraction. Bush wrote to Congress last month suggesting that part of his original commitment should be paid for by cutting \$95 million from next year's funding for the National Institutes of Health (NIH).

According to a memo to Bush from Mitch Daniels, the White House budget director, the transfer would involve a \$25-million tap on the National Institute of Allergy and Infectious Diseases (NIAID), which supports much of the NIH's AIDS, malaria and tuberculosis research portfolio. The other \$70 million would be removed from the administration's plan to spend \$306 million on building and improving the NIH's research facilities.

AIDS activists reacted indignantly to the proposed transfer. "The whole point of this fund is to create a new source of money for battling those three diseases, not to rob Peter to pay Paul," says Alexis Schuler of the advocacy group AIDS Action.

A spokesman for the NIH says it was "too early to tell" how the White House proposal would affect individual construction projects or the details of the NIAID's budget.

But sources in both the House of Representatives and the Senate say that Congress is unlikely to accept the idea of money for the new fund being transferred from the NIH. One reason for the likely rejection is that the administration has already sought to use the bulging NIH budget to bankroll other health-related programmes worth \$460 million.