

# Protesters seek US ban on embryo stem-cell work . . .

[WASHINGTON] More than 100 anti-abortionists, led by a conservative US senator, last week released a statement arguing that research on human embryonic stem cells is scientifically unnecessary and urging Congress to fund alternatives.

The statement came as debate on the issue heated up in Washington in anticipation of the release this month of a report from the National Bioethics Advisory Commission. The commission is expected to recommend that the government should fund both the derivation of stem cells from embryos — which needs the embryos to be destroyed — and the use of the cells in research.

The National Institutes of Health (NIH) is also due soon to issue guidelines for the investigators it funds. The NIH has already said it will fund research on stem cells, but not their derivation from human embryos (see *Nature* 397, 185 & 399, 292; 1999).

The group that signed last week's statement included Frank Young, a former commissioner of the Food and Drug Administration (FDA), C. Everett Koop, a former surgeon general, and Edmund Pellegrino, director of the Center for Clinical Bioethics at Georgetown University, Washington DC.

The statement was coordinated by the Center for Bioethics and Human Dignity in Bannockburn, Illinois. It was released at a press conference at which Senator Sam Brownback (Republican, Kansas) said that research on human embryonic stem cells is

"immoral, illegal and unnecessary".

Brownback and the signatories to the statement contend that research on stem cells and their derivation from human embryos violates a federal law forbidding research in which embryos are destroyed or discarded. They said that recent research showing that stem cells isolated from adult tissues can give rise to differentiated cells removes the need for research on embryonic stem cells.

Young, who served as FDA commissioner under President Ronald Reagan, compared the development of cell and tissue therapies from embryonic stem cells to the making of saddles from human skins by Nazi Germans. He predicted "a backlash of the American people" if federal funding for the work proceeds. Fear of such a backlash has made corporate America "very apprehensive" about funding the research, he claimed.

But John Gearhart, a professor of obstetrics and gynaecology at Johns Hopkins University School of Medicine in Baltimore, says it is unproven that stem cells from adult tissue can generate all the tissues of the body.

"Clearly, embryonic stem cells produce more types of cells than the [stem] cells obtained from adult tissue," says Gearhart. "We should leave our options open" by pursuing embryonic stem-cell research. Gearhart announced last November that he had isolated stem cells using germline cells from aborted fetuses (see *Nature* 396, 104; 1998).

Meredith Wadman

## ... as Wisconsin researcher awaits go-ahead

The current debate on the ethics of stem-cell research (see above) was launched by the work of James Thomson, who isolated human embryonic stem cells from the inner cell mass of embryos left over at fertility clinics. Thomson relied on private money from Geron, a Californian biotechnology company, to achieve his feat. Private work with stem cells is legal in the United States, and is likely to remain so. The debate centres on whether such work should receive federal funding.

But Thomson, a developmental biologist at the University of Wisconsin-Madison, says his private-sector financing has

left him far from untouched by the ban on federal funding.

This is because the ban requires strict separation of stem-cell work from federally funded work. Thomson had to set up a physically separate laboratory in 1997 when he launched his effort to isolate the cells.

That laboratory, at the Clinical Science Center at the University of Wisconsin Hospital and Clinics in Madison, is not as well equipped as his main laboratory. Thomson has been forced to limit his current research to basic tissue-culture manipulation experiments. Tantalizing challenges, such as

identifying the genes that direct stem cells to become one tissue type or another, are being deferred through lack of equipment.

Thomson is therefore anxiously awaiting the publication of the NIH guidelines that will tell investigators how to proceed when applying for, and using, federal funding for the research. Despite the Congressional ban, the biomedical agency thinks it is permitted to fund research on stem cells, following advice from lawyers in the Department of Health and Human Services. The publication of guidelines will signal that the NIH is ready to begin issuing grants. **M. W.**

## US universities request special help as visa quota is reached early

[WASHINGTON] Despite legislation that nearly doubled the number of computer programmers, academic researchers and other high-tech workers allowed into the United States in 1999, the annual quota of H-1B visas has been reached with three months still remaining in the fiscal year.

All 115,000 visas in the category were given out by the middle of last month, and the US Immigration and Naturalization Service (INS) says it will not grant any more until October.

Congress raised the H-1B quota from 65,000 last summer after a lengthy political fight that pitted US labour advocates against the computer software industry, which is keen to hire more foreign programmers (see *Nature* 394, 610; 1998).

American universities use only a small fraction of the H-1B allocations each year for faculty appointments. But evidence collected by the Washington-based Association of International Educators (NAFSA) suggests that universities bear a disproportionate amount of the pain when visas run out early. Because the academic fiscal year ends in July, new faculty tend to be hired just when the H-1Bs are becoming scarce.

Representatives from NAFSA, the College and University Personnel Association, and the Association of American Universities met with key legislators last month to plead their case. Among the proposals to address the special needs of higher education would be a plan to reserve a certain number of H-1B visas for academic use.

But this would have to be done through legislation, and observers say there is little appetite on Capitol Hill this year for another battle over high-tech visas.

Senator Phil Gramm (Republican, Texas) plans to introduce a bill this month calling for the H-1B cap to be raised permanently to 200,000. But this would almost certainly be opposed by the White House and many pro-labour Democrats, and is given little chance of passing.

Meanwhile, Lamar Smith (Republican, Texas), who chairs the House of Representatives subcommittee on immigration and was a key figure in last year's H-1B compromise, has been more concerned recently about the misuse of visas, particularly in India, which he says is taking a significant portion of the annual quota.

According to an investigation cited by Smith, 45 per cent of H1-B applications examined by a US consulate in India could not be authenticated, and 21 per cent were fraudulent.

Tony Reichhardt