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Universities Could End Research on Some Federally Eligible Stem-Cell Lines

By *JOSH KELLER*

Several of the top institutions that conduct embryonic stem-cell research are considering ending research on nearly a quarter of the cell lines eligible for federal funds because of new ethical concerns raised about the origin of the lines.

A consensus to ban research on the lines would further limit, from 21 to 16, the number of human embryonic stem cell lines available to researchers supported by federal funds. A policy announced by President Bush in August 2001 restricted federal support for the research to cell lines that existed before the president's speech.

The discussions come in response to an article published in May by an associate professor at the University of Wisconsin, Robert Streiffer. Mr. Streiffer found problems with the consent forms donors signed before the lines were originally derived. In one case, Mr. Streiffer wrote, patients were told their embryos would be destroyed at the end of a single experiment.

Expert panels at Stanford and the Johns Hopkins Universities have already decided to stop research on the lines, according an article by the Center for American Progress, which first reported the discussions on Friday. The organization is a Democratic-affiliated think tank that opposes President Bush's restrictions on stem-cell research.

Reviews of Ethics

Officials at two other institutions reached over the weekend said they also are planning to discuss the future use of the five lines. The issue "will be a topic of discussion at the next scheduled meeting," said Timothy J. Kamp, co-chair of the University of Wisconsin's executive committee on stem cells. The California Institute for Regenerative Medicine, the state agency that finances stem-cell research, is also reviewing whether the issue should come to the organization's ethics board for discussion, said Don Gibbons, an institute spokesman.

Hank Greely, a law professor at Stanford, an expert in biomedical ethics, and chairman of California's advisory committee on human embryonic stem-cell research, would not comment on any discussions by the university. But he said Mr. Streiffer's research raised "real questions" about the lines.

"They need to be examined," Mr. Greely said. "Based on what he turned over, it looks like they did a poor job of vetting those lines, and that's really a shame."

In a statement, Stanford said the article by the Center for American Progress was "inaccurate" and said no final decision had been reached on the use of the lines. "A final recommendation will be

made after a thorough review by the institution," said Paul Costello, a spokesman for the university's medical school.

It is not clear how problems with the lines, which were started nearly 10 years ago, were missed during previous reviews by the National Institutes of Health. The lines have been at the center of a debate over how much leeway scientists should have to use stem-cell lines derived from human embryos.

Consent-Form Issues

Patient consent forms for lines developed by two companies, BresaGen and Cellartis, had a variety of potential ethical problems, Mr. Streiffer said. One company's form failed to tell patients the specific nature of the research that would be conducted using their embryos. Another said the embryos would be destroyed at the end of a first, narrow experiment. "If you've told a donor that and then you don't comply with it, that's a clear problem," he said. BresaGen and Cellartis could not be reached for comment over the weekend.

Mr. Streiffer said he obtained the patient consent forms by filing a Freedom of Information Act request.

Many scientists believe research into stem cells could lead to new treatments for diseases like Alzheimer's, diabetes, and cancer, while many conservatives believe the research is immoral because it involves destroying human embryos. President Bush's policy limiting federal support to existing lines, but not new ones, was intended to be a compromise.

But the policy has focused attention on the existing lines, which scientists have said have a number of problems, including genetic mutations and contamination with mouse DNA. Those issues reduced the number of usable lines from than 60 to 21.

Eliminating research into the lines may not have a large effect on stem-cell research as a whole. In order to avoid the federal restrictions, many institutions rely largely on private funds to pay for stem-cell research, and a state program in California is putting \$3-billion into the research over 10 years.

In addition, the five lines in question are not among the ones most often used in federally funded research, according to Mr. Streiffer.

But Mr. Streiffer said that his findings demonstrate the problems scientists have with the president's policy. "We learn as we go, but the Bush policy ties us to what we knew back in 2001," he said. "It prevents us from making the kinds of decisions we should be making."