

# Institute makes stem cells from embryos with diseases

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A Chicago institute that has sparked controversy about test-tube and made-to-order babies has broken new ground in creating stem cells that should help researchers study inherited diseases.

A team at the Reproductive Genetics Institute at 2825 N. Halsted has created [13 lines of stem cells](#) that carry different mutations that cause genetic diseases. According to NewScientist magazine, the cell lines came from embryos for in vitro fertilization that were found to have the mutations that cause the diseases.

"The embryo that's already at the stage where it is diagnosed with a disease is a unique situation," said Yury Verlinsky, the institute's founder, president and CEO. "We designed a little different way to make a stem cell line."

The institute reported its breakthrough at a meeting in June of the International Society for Stem Cell Research in Boston.

The resulting stem cells could be stockpiled for use in researching any number of genetic diseases, including incidences of Fragile X and Becker muscular dystrophy.

Researchers could choose cells directly affected by a disease -- say, parts of the brain impaired by Fragile X -- without having to take samples of living tissue from people who suffer from the disease.

Indeed, the Chicago institute is offering the stem cell lines to various groups that research such diseases.

Verlinsky hopes that in the future, taxpayer-funded stem-cell research will be reinstated.

The Bush administration halted such funding because it opposed the destruction of human embryos. Embryos are destroyed when stem cells are extracted from them, and some politicians liken the process to abortion.

Verlinsky said stem cell lines already in existence provide inadequate material for research.

The institute has ensured that its hands are not tied, in Verlinsky's words, because it receives no federal funding. The institute gets most of its money from patients who use the institute's in vitro fertilization technology to conceive children, including children who can donate life-saving tissue for ill siblings.

Its latest research appears less controversial than the institute's efforts to ensure disease-free and made-to-order babies.

The new lines of embryonic stem cells could provide a wealth of material for research into genetic diseases.

The stem cells also are far superior to the cells of animals with diseases similar to those of humans, according to a report in NewScientist magazine. A key reason is that researchers can determine quickly whether a human cell would have an adverse reaction to a drug or to other possible treatments, instead of spending years testing it.