

Patrick Carberry
Skin Cells made to mimic Embryonic Stem Cells
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A Human Embryonic Cell is a specialized cell contained in a human embryo, or fertilized egg that has the potential to differentiate into virtually any tissue contained in the human body. Much of the research that has been done on human embryonic Stem Cells has been limited by ethical barriers set in place.

On August 9, 2001 President George W. Bush set forth regulations and barriers on the research of Human Embryonic Stem Cells. The major conclusions of his speech were that no future research would be conducted on Stem Cell lines, and no future federal funding would be set aside for Stem Cell research.

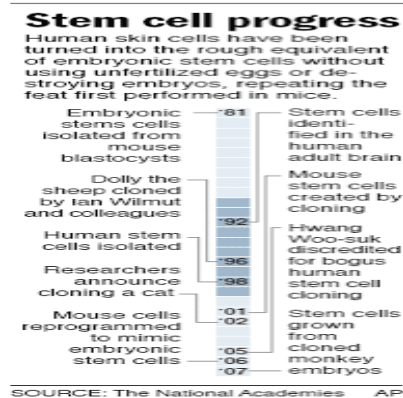
On November 20, 2007 scientists from Wisconsin and Japan were able to show that human skin cells had the potential to differentiate into human embryonic stem cells. The principles detailed in Cell and Science do not require embryos or unfertilized eggs cells. The technique involves slipping a set of four genes into skin cells, in a specially prepared culture that coaxes the cells to behave like an embryonic stem cell.

Like embryonic stem cells, these reprogrammed cells become "pluripotent", with the ability of changing themselves into virtually any tissue type in the human body, including neurons and heart tissue. They also exhibit many of the other biochemical properties of embryonic stem cells, although they're not genetically identical to stem cells.

Current State of Research has deemed that the cells are too risky for treatment. Much research still needs to be conducted on the human embryonic Stem Cell Lines before further progress can be made.

Some of the Past Embryonic Stem Cell Researches have abandoned human embryo research.

Many Scientist's fear that the new research will blot out all prior work done on cells, and virtually create a setback in the part work done.



The White House. George W. Bush.
Stem Cells 2001

<http://www.whitehouse.gov/news/releases/2001/08/20010809-1.html>

Skin cells made to mimic stem cells.
MSNBC.

<http://www.msnbc.msn.com/id/21886974/>

Method Equalizes Stem Cell Debate.
The NY Times.

<http://www.nytimes.com/2007/11/21/washington/21bush.html>