

# **Bioethical Issues**

Stem Cell Research

By: Bryan B. & Garrett H.

# **Intro: What are Stem Cells?**

Stem cells are undifferentiated cells from multicellular organisms that are capable of creating specialized cells. Like a book that gets copied in a printing press.

# Questions Addressed:

- Is it ethical or unethical to take stem cells from fetuses?
- Are there other ways of getting stem cells without destroying fetuses?

# How are stem cells useful?

It has been suggested that they can be used to replace or repair damaged tissue due to certain illnesses such as: Alzheimer's, Parkinson's, heart diseases, diabetes, and more.

# Challenges of retrieving Stem Cells

Scientists would take small stem cells from a person, then test them. Or they would produce an embryo from those stem cells and grow the embryo purely for scientific study (ei: a clone)

# Other Methods:

Another thing going into question is; why not extract stem cells from other sources?

- Recently, adult stem cells have been isolated in people. Scientists have ways of extracting 'Mesenchymal' cells from bone marrow (these grow bones, cartilage, fat, and connective tissues) and Neural stem cells from the brain and spine (grow the brains 3 major cells).

- Some people are arguing the use of these 'clones' for scientific research.
- These people are arguing that these embryos are people too, that they have individual thought.
- People are arguing whether it is okay to kill these embryos

*Le Finn*



# What do we like most?

The application of stem cells to biotechnology in order to change cells in other peoples bodies.

I like how stem cells can be used to repair damaged organisms in the human body.

# **What more do we want to know?**

I would like to learn more about how scientists physically apply these new cells.

I would like to know more about how scientists use stem cells to produce clones.

- <https://www.spuc.org.uk/about/no-less-human/ethicalstemcells.pdf> No Less Human organization
- <http://stemcell.childrenshospital.org/about-stem-cells/adult-somatic-stem-cells-101/where-do-we-get-adult-stem-cells/>