

STEM CELL RESEARCH: MYTH VS. FACT

A Pharmaceutical Perspective

The following has been prepared by Adolf Schimpf, former Director at a major pharmaceutical company, using information from National Institutes of Health reports and from personal industry experience.

WHAT ARE STEM CELLS?

- *Embryonic Stem Cells* start the development cycle of a complete human being. *Adult Stem Cells* are used in nature to heal sick or injured organs and tissues throughout a person's life.

WHERE DO RESEARCHERS GET STEM CELLS?

- *Embryonic Stem Cells* are removed from an in-vitro embryo, resulting in its death. *Adult Stem Cells* can be extracted from amniotic fluid, cord and placenta blood, and many locations in adult bodies throughout life.

WHAT IS THE FUNCTION OF EMBRYONIC STEM CELLS IN THE HUMAN BODY?

- Within a human egg after fertilization, *Embryonic Stem Cells* separate into three clusters and begin to generate the different organs and tissues needed to make an entire human body. In nature, the *only* function of *Embryonic Stem Cells* is to start the *entire* human body ... they do not make or cure single organs.

HOW DO ADULT STEM CELLS FUNCTION TO HEAL THE HUMAN BODY?

- *Adult Stem Cells* are part of the body's healing process throughout life, starting in the unborn child.
- Sick or injured organs send out a chemical signal that activates the body's healing systems and *Adult Stem Cells*.
- *Adult Stem Cells* within or near the target organ transform into tissue that is in need of repair.
- Research with *Adult Stem Cells* involves only finding out how the body uses these cells naturally.

WHY HAVE NO CURES BEEN FOUND USING EMBRYONIC STEM CELLS?

- All activity of *Embryonic Stem Cells* is controlled by an internal cell control program that starts at conception.
- No one knows how the program works, and it is not possible to measure the control process.
- Achieving cures using *Embryonic Stem Cells* requires activity that these cells do not perform in nature, unlike the activity of *Adult Stem Cells*.

WHAT HAS BEEN ACHIEVED BY STEM CELL RESEARCH?

- *Adult Stem Cells* have already been used to successfully treat **73 different diseases**.
- *Embryonic Stem Cells* have achieved **zero** cures ... Why continue to waste time and resources on them?

WHAT IS THE NEW JERSEY STEM CELL RESEARCH REFERENDUM?

- Many citizens oppose *Embryonic Stem Cell* research because it involves destruction of human life at the start.
- The Referendum asks for \$450 million tax dollars to perform research **including use of Embryonic Stem Cells**.
- It allows for raising property taxes if insufficient funds are collected to pay for the bond, wasting tax dollars on research not proven to work, despite many years of effort and major investment in the US and several countries.

**MAKE YOUR VOICE HEARD: ON NOVEMBER 6, 2007,
VOTE NO ON THE STEM CELL RESEARCH REFERENDUM!**

To learn more, visit www.Stemcellresearch.org