

Adult Stem Cells Shut Out Embryonic Stem Cells 73-0

November 20, 2007: Researchers induce ordinary skin cells to become stem cells that are pluripotent naming them iPS - induced Pluripotent Stem Cells.

This is very important because it means that research using pluripotent stem cells does not have to use human embryonic stem cells (hESC), which when taken from the human embryo, destroys the embryo, the most innocent form of human life. iPS cell research is ethically non-controversial.

WHAT IS A STEM CELL?

It is a cell, having in it the incredible ability to replicate and make any type of cell required to build or repair an organism. It is responsible for our growth from a single cell to mature adult. Our bodies use stored stem cells to repair tissue damage throughout our lives. This amazing ability gives hope to stem cell therapies.

WHAT ARE THE KINDS OF STEM CELLS?

There are two kinds of stem cells: embryonic and adult. EMBRYONIC stem cells are taken from the unborn embryo and fetus. All other stem cells fall into the category of ADULT stem cells, including stem cells obtained from umbilical cord blood, bone marrow, skin, nose, eyelid, teeth, hair, blood, etc. of an adult or child.

WHY THE CONTROVERSY?

The human being in the embryonic stage of development dies as the result of taking his or her embryonic stem cells making embryonic stem cell research ESCR immoral. An ESC implant could only be successful by cloning (also immoral) the patient to avoid rejection.

WHAT ABOUT THE NEW iPS CELLS?

iPS cells are cells that have the same pluripotency as embryonic stem cells, but are obtained in such a way that no human life has to be destroyed. iPS cells are obtained by reprogramming an ordinary somatic (body) cell, such as a skin cell, back to a pluripotent state. The stimulants needed to do this do not come from the unborn and thus iPS stem cells are ethically non-controversial because they do not require the destruction of human life or the use of human cloning.

However, because the stimulants could be taken from the unborn, legislation for funding will have to be carefully worded to exclude the use of embryonic stem cells.

WHAT DOES PLURIPOTENT MEAN?

Pluripotent stem cells can turn into nearly all the 200 plus cell types found in the adult body as the embryonic stem cells of the human embryo do under the ideal conditions of the womb. In fact, this has only ever happened in the womb, never in the laboratory, which is rarely mentioned in the media.

A few adult stem cells, found in the umbilical cord, the nose and bone marrow, have the properties of being pluripotent but have never received media attention.

Most adult stem cells are multipotent, that is, they can turn into several other cell types. Proponents of (ESCR) consider the fact that ASC cannot turn into almost every cell type found in the body a limitation and insist that ASC are therefore inferior. However, while each line of multipotent ASC is more limited than the "ideal" ESC line, there are many kinds of multipotent lines resulting in actual successful therapies.

WHY IS THERE SO MUCH CONFUSION?

Overall, there just hasn't been a distinction made between the two types of stem cells. Articles reporting therapies using adult stem cells attribute them to stem cell research (SCR) in general, leaving out the word adult. The audience is misled into believing that there have been successful therapies with embryonic SCR when there have been none. ESCR is failed research.

On the other hand, adult stem cells have provided therapeutic benefits for hundreds of thousands of human patients in the areas listed to the right.

When the two categories of stem cells are given, embryonic stem cells are touted as being superior to adult stem cells because ESC's are pluripotent and grow much faster than ASC's. No mention is made that in the lab ESCs grow uncontrollably into tumors, mostly cancerous, indicating potentially lethal side effects.

WHAT IS THE ROOT CAUSE?

Investment in embryonic stem cell research ESCR has dropped dramatically. Billionaires and large corporations have lost billions of dollars over the last 25 years.

These investors now lobby for our tax dollars selling the "potential" hype to the media and on to the voters. They know that once they get their foot in the door, it is all a matter of budget; and with their lobbyist efforts the -funds are virtually unlimited. They hope that eventually ESCR will be successful so they can recoup their losses.

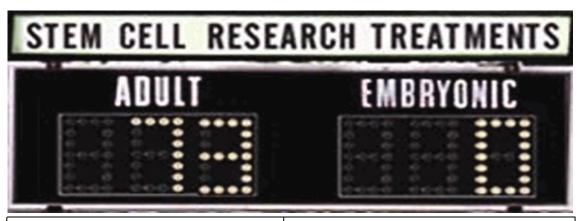
There are many labs, researchers, and companies set up for embryonic stem cell research and cloning. They will put up a fight to stay open and to continue their research.

WHAT IS THE STRATEGY?

Proponents of ESCR use the life issues debate to get pro-abortion advocates to vote for government funding. They will repeat again and again to the media that the

study of stem cells requires human embryonic stem cells. They will continue to quote, repeat, and implant the Communist philosophy, "If it helps someone, I'm for it."

not make them right. The laws are not in place to protect humanity. Keep up with current legislation at: www.capwiz.com/nrlc/issues



Adult Stem Cells Have Provided Therapeutic Benefits To Patients For:

Cancers

Brain Cancer Retinoblastoma Ovarian Cancer Skin Cancer: Merkel Cell Carcinoma Testicular Cancer Tumors abdominal organs Lymphoma Non-Hodgkin's Lymphoma Hodgkin's Lymphoma Acute Lymphoblastic Leukemia Acute Myelogenous Leukemia Chronic Myelogenous Leukemia Juvenile Myelomonocytic Leukemia Chronic Myelomonocytic Leukemia Cancer of the lymph nodes: Angioimmunoblastic Lymphadenopathy Multiple Myeloma Myelodysplasia Breast Cancer

Neuroblastoma Renal Cell Carcinoma

Various Solid Tumors Soft Tissue Sarcoma Ewing's Sarcoma Waldenstrom's macroglobulinemia Hemophagocytic lymphohistiocytosis POEMS syndrome Myelofibrosis

Auto-Immune Diseases

Diabetes Type I (Juvenile) Systemic Lupus Sjogren's Syndrome Myasthenia Autoimmune Cytopenia Scleromyxedema Scleroderma Crohn's Disease Behcet's Disease Rheumatoid Arthritis Juvenile Arthritis Multiple Sclerosis Polychondritis Systemic Vasculitis Alopecia Universalis

Ocular

Corneal regeneration

Buerger's Disease

Cardiovascular Acute Heart Damage

Chronic Coronary Artery Disease

Immunodeficiencies

Severe Combined Immunodeficiency Syndrome X-linked Lymphoproliferative Syndrome X-linked Hyper immunoglobulin M Syndrome

Neural Degenerative Diseases and Injuries

Parkinson's Disease Spinal Cord Injury Stroke Damage

Anemias and Other Blood Conditions

Sickle Cell Anemia Sideroblastic Anemia

Aplastic Anemia Red Cell Aplasia Amegakaryocytic Thrombocytopenia

Thalassemia

Primary Amyloidosis Diamond Blackfan Anemia

Fanconi's Anemia Chronic Epstein-Barr Infection

Wounds and Injuries

Limb Gangrene Surface Wound Healing Jawbone Replacement Skull Bone Repair

Other Metabolic Disorders

Hurler's Syndrome Osteogenesis Imperfecta Krabbe Leukodystrophy Osteopetrosis Cerebral X-Linked Adrenoleukodystrophy

Liver Disease Chronic Liver Failure

Liver Cirrhosis

Bladder Disease

End-Stage Bladder Disease

Embryonic Stem Cell Research

Has Not Helped Anyone

Not Even One Person!

After 25 Years Of Research

After Billions Of Dollars Spent

Embryonic Stem Cell Research Is Failed Research

"The End **Justifies** The Means" **Is A Communist Philosophy Not American**

SAY NO TO FUNDING EMBRYONIC STEM CELL **RESEARCH**

Credits:

Do No Harm, The Coalition of **Americans for Research Ethics** www.StemCellResearch.org

James M. Rossetti, D.O. **Adult Stem Cell Specialist** Pittsburgh 412-578-4355

Citizens Concerned For Human Life Stand On Life Issues

WE SUPPORT The Right To Life

From Fertilization (Conception) **Until Natural Death**

WE OPPOSE

Abortion On Demand

For The Sake Of The Unborn Child **Abortion Hurts Women**

WE AFFIRM

The Life Of The Smallest Human A Single Cell At Fertilization And The Embryo The Growing New Life

WE SUPPORT

Adult Stem Cell Research Morally Acceptable

Does Not Destroy Human Life

Stem Cells Are Easily Obtained From The Person Being Treated Without Harm To The Donor

Has Provided Therapeutic Benefits To Hundreds of Thousands of Patients

> iPS Cell Research That Does Not Use ESCR

ADULT SCR = LIFE

WE OPPOSE

Embryonic Stem Cell Research Immoral

Human Life Is Destroyed

Requires Immoral Cloning **Because Of Rejection Problems**

EMBRYONIC SCR = DEATH To The Most Innocent Among Us



35th ANNUAL **MARCH FOR LIFE**

JANUARY 22, 2008 Washington, DC

For information on the March for Life bus trip, please call:

> 269-1470 536-7335 472-8584 479-4514 948-6842 344-8371

> > 634-8472





