

ADULT STEM CELLS *can* TURN INTO MANY TISSUE TYPES....

Some proponents of embryo stem cell research have claimed, several times in recent days, that adult stem cells are not capable of turning into different tissue types.

THIS CLAIM IS BLATANTLY FALSE, BASED ON “OLD SCIENCE”!!! Let me set the record straight.

- Since 2001, scientists have been publishing study after study showing the remarkable and unexpected ability of adult stem cells to turn into different tissue types.

It is true that there is discussion in the field about HOW adult stem cells work in tissue repair and HOW MANY different cell types they can become. But this is really “inside baseball,” a semantic argument among scientific elite. What is NOT in dispute is that adult stem cells are being used SUCCESSFULLY in HUMAN PATIENTS.

- Note this statement by ESC and cloning proponent Robert Lanza in 2003, after some scientists claimed they had “disproven” the flexibility of adult stem cells:

“there is ample scientific evidence that adult stem cells can be used to repair damaged heart or brain tissue...if it works, it works, regardless of the mechanism”

- and a similar statement by Alan Trounson, also a ESC/cloning proponent, written in a review of an international meeting of the top stem cell researchers in 2004:

“it is apparent that some adult stem cells...have a greater plasticity than others and are able to contribute to a wide range of different tissues”

Here are a few of the latest studies showing the amazing flexibility of adult stem cells...

--In 2004 (a year after the study which supposedly “disproved” adult stem cell plasticity), scientists from Germany, in collaboration with scientists in the US, showed that human umbilical cord blood cells could become EACH of the 3 major tissue types of the human body, and published their results in the *Journal of Experimental Medicine*.

--In February of this year, scientist from Tufts University in Boston showed, in the *Journal of Clinical Investigation* that bone marrow stem cells could be:

- (1) expanded from a single cell into a large volume of cells,
- (2) induced to become EACH of the 3 major tissue types of the human body and
- (3) could then REGENERATE damaged heart when injected into human patients.

--In March of this year, scientists from Australia showed that adult stem cells from the human NOSE could become multiple different tissues.

The past 5 years have been a remarkable time for the adult stem cell field, yielding promising results that have turned old scientific dogma on its head. THIS is where the US government should be investing its limited resources. It is simply UNECESSARY to use taxpayer funds to kill embryos for research when other ethically sound lines of research are proving so fruitful!