

to help, or at least do no harm."

— Hippocrates, The Epidemics —

"As to diseases, make a habit of two things —

THE "POLITICAL SCIENCE" OF STEM CELLS LESSON 3: PAY ATTENTION TO YOUR OWN SCIENTISTS' RESULTS

Congress may vote soon on whether to divert taxpayer dollars toward stem cell research that requires destroying live human embryos. In the campaign to promote such funding, political hype has often substituted for the scientific facts. This series will help members of Congress distinguish mere politics from science.

POLITICAL:

[Explaining why adult and umbilical cord blood stem cells are inferior to embryonic stem cells:]

"[T]hose are cells that have significantly differentiated; that is, they are **no longer pluripotent or capable of transforming into other cell types**. For the true biological miracles that researchers have only begun to foresee, medical science must turn to undifferentiated stem cells."

- Christopher Reeve, testifying to Congress on behalf of the Christopher Reeve Paralysis Foundation, April 26, 2000, www.chrisreevehomepage.com/testimony-nih.html (emphasis added).

SCIENCE:

- "Pluripotent stem cells have been detected in multiple tissues in the adult, participating in normal replacement and repair, while undergoing self-renewal."
- First sentence of a scientific study funded by the Christopher Reeve Paralysis Foundation, submitted for publication March 31, 2000 (emphasis added). The authors cite 11 earlier studies in support of this statement, and conclude that mesenchymal stem cells from adult bone marrow would have significant advantages over embryonic stem cells in treating a variety of neurologic diseases. See D. Woodbury et al., "Adult Rat and Human Bone Marrow Stromal Cells Differentiate Into Neurons," 61 *J. of Neuroscience Research* 364-70 (2000).

Since 2000, at least seven more major studies have demonstrated the amazing versatility of adult stem cells. For citations see PowerPoint presentation by David A. Prentice, Ph.D., "Cloning and Stem Cell Research," www.stemcellresearch.org/testimony/prentice_2005-01-03.pdf, p. 20.

For more information to help distinguish politics from science on stem cell research, see our web site at www.stemcellresearch.org.

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