
Where do we go from here?

Funding for adult stem cell research

Adult stem cell research holds great promise for cures of terrible diseases such as Parkinson's, Multiple Sclerosis, cancer and diabetes and for the reversal of damage from spinal cord injuries and stroke. This research would benefit from much greater and reliable resources. Adult stem cell research should, therefore, be given priority for government funding.

Moratorium on embryonic stem cell research

Due to the scientific risks and ethical dilemmas associated with human embryonic stem cell experimentation, a moratorium should be issued on funding for such research. The government should also ban any related research performed by private sources throughout the period of the moratorium.

The controversy that surrounds the question of embryonic stem cell research expends a great deal of effort that should be redirected towards more promising pursuits. Many wonder why the energy and resources being used for the political fight for embryonic stem cell experimentation are not being better invested in ongoing adult stem cell research with its solid track record of success.

A moratorium on human embryonic stem cell experimentation, with a concurrent increase in funding for adult stem cell research, would help focus researchers' efforts on the best probability for stem cell cures for some of today's most debilitating diseases.

Such a move would also give Canada the opportunity to stake out territory as a world leader in this exciting frontier of modern medicine.

What can you do?

- A petition is circulating across Canada expressing support for adult stem cell research. Members of Parliament are already receiving a number of these signed petitions, and need many more to present in Parliament in the fall. If you have not yet seen the petition, you can request one by calling (416) 204-9749.
- Write to your Member of Parliament expressing your views on this crucial issue. Your MP's postage-free address is:
House of Commons, Ottawa, ON K1A 0A6.
- Contact the Health Minister, the Honourable Anne McLellan at:
House of Commons,
Ottawa, ON K1A 0A6
Phone: (613) 957-0200;
Fax: (613) 943-0044
Email: McLellan.A@parl.gc.ca
- Contact the Chair of the Parliamentary Health Committee, Bonnie Brown at:
House of Commons,
Ottawa, ON K1A 0A6
Phone: (613) 995-4014;
Fax: (613) 992-0520
Email: Brown.B@parl.gc.ca

- **Educate yourself and others.**

Campaign Life Coalition

**104 Bond Street Suite 300
Toronto, Ontario MSB IX9**

Phone: 416-204-974

Fax: 416-204-1027

web site: www.lifesite.net



Making Stem Cell Research a Priority

**The pressing need
for scientifically
and ethically
acceptable stem cell
research**



What are stem cells?

Stem cells are the “master cells” found in every tissue in the body, which continue to reproduce those tissues throughout one’s life. They can be manipulated in the laboratory to produce different kinds of cells and tissues. At the present time they can be obtained from many different organs and tissues such as blood, bone marrow, skin, brain tissue, muscle and fat.

Adult stem cells are stem cells that have become mature or specialized and can be taken from various tissues and organs and also from placental tissue and umbilical cord blood. Until recently, many researchers were convinced that placental and umbilical cord stem cells were so few in number that they would only be useful for treating children. Recent research is demonstrating that this limitation does not exist.

Embryonic stem cells are those extracted from an embryo. This process requires the death of the embryonic human being.

Adult stem cells offer great hope

Adult stem cell research is an exciting and essential frontier in medicine today, especially for those suffering with degenerative diseases such as Parkinson’s, Alzheimer’s and Multiple Sclerosis, or facing the tragedy of spinal cord injuries, and hoping for the cures anticipated through stem cell experimentation.

Announcements of medical breakthroughs using adult stem cells, which include those collected from umbilical cord, placental tissue, and other tissues in adults are continually being made around the world.



Great progress from adult stem cells

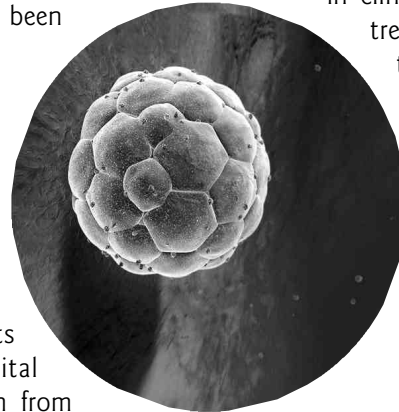
The medical benefits of adult stem cells far exceed researchers’ expectations of just two years ago.

- Bone marrow transplants have been used successfully for many years.
- Parkinson’s disease (cf. a patient treated by Canadian neurosurgeon, Dr. Michael Levesque with stem cells taken from the patient’s own brain).
- Multiple Sclerosis (cf. four patients treated by Ottawa Hospital researchers with stem cells taken from their own bone marrow).
- Crohn’s Disease (cf. some American patients have been successfully treated with their own blood).
- Blood diseases – Several studies in the past few years indicate success in the treatment of myeloma and leukemia both with the use of a patient’s own stem cells and with umbilical cord blood.

This new knowledge needs to be factored into researchers’ assessments so that adult stem cell research is given top priority.

There is little evidence that this new data is being incorporated into the consideration of which avenues to take in stem cell research.

The claims about the effectiveness of embryonic stem cell research give the public the impression that this research is a moral imperative. These claims are simply not scientifically accurate.



Scientific risks surrounding embryonic stem cell experimentation

Embryonic stem cells have never been successfully used in clinical trials. However, in spite of this and the tremendous practical success of adult stem cell therapies, some scientists still insist that real progress in stem cell research will only come by way of embryonic stem cells.

Additionally, embryonic stem cells are far from the utopian medical breakthrough that many suggest.

- Embryonic stem cells appear to be subject to random and uncontrollable growth. On the other hand, adult stem cells seem to be more predictable in responding to the growth factors and hormones that function to re-direct their development.
- Embryonic stem cells have been known to grow into the wrong type of cells, in some cases such as hair and teeth growing in the brain of treated patients.
- Perhaps the greatest clinical problem with implanted embryonic stem cells is that the body flags them as foreign material. Consequently, they are subject to rejection by the patient’s immune system.

Patients treated with tissue derived from embryonic stem cells would, therefore, require a life-long regimen of anti-rejection drugs with the attendant side effects.

The growing need for anti-rejection drugs would be a financial windfall for pharmaceutical companies.