

# In Defence of Life

## Edmonton Prolife's Newsletter

www.edmontonprolife.org

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'educating for life'

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### Embryonic Stem Cell Therapies. Snake Oil?

Snake Oil is known as a derogatory term applied to a product whose developers describe it with misleading, inconsistent, or incorrect technical statements? Can this definition apply to embryonic stem cell research therapies?

Media reports claim that the ability to restore mobility to handicapped, grow new organs for transplant, and cure Parkinson's and more is to be found in embryonic stem cell research. The reason for this not happening, according to the media, is those self-righteous people who get hung up on clump of cells being worthy of protection. Surely the potential for healing and curing that embryonic stem cells hold far outweighs the protection of a few cells destined for the garbage or those fetuses who will be aborted anyway. Surely the claims of scientists and researchers must be promoted over the lives of the yet to be born. Surely existing life outweighs potential life? This seems to be the mantra we hear in the public, but what we do not hear is the facts about the failures of embryonic stem cell research.

Inside this issue of "In Defence of Life" you will have the opportunity to find out what the laws in Canada are regarding stem cell research, who has benefited from stem cell research and the difference between adult stem cells and embryonic stem cells. Although the technology of stem cell research may be beyond our understanding the basic understanding that life begins at conception is not. The fact that readily available stem cells from adults can be used and cause no

ethical debate and to date the only stem cells that have any cure or therapy success, have been adult stem cells, places us on sure footing when we are debating those who advocate the use of life destroying embryonic stem cell research.

### President's Message

The debate about stem cell therapies is not about when human life begins. The debate is whether every human life is equal.

It is a biological fact that a human life begins when an embryo is created. The embryo is a human and it is alive. Its life will last until its death, whether days after conception (killed for stem cells), natural death at a ripe old age or euthanized (unnatural death). It takes moral courage to believe that young and old, strong and weak, are equal through our common humanity.

Biotechnology, like any other science, can be used for good or harm, benefits or destruction. Power, fame, wealth, and greed will clash with higher ideals of dignity and the value of every embryo created in God's image.

Adult stem cells regeneration shows how marvelous our bodies are, capable of healing ourselves (and others). The research is astounding: new tissue, new organs grown from our own cells.

We have to take to task the media when they do not differentiate between embryonic or adult stem cells. There is a big difference, one that is life giving and the other which is life destroying. Please take the time to become informed. Let the media and others know that Pro-lifers love adult stem cell research!

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Corry Morcos  
President  
Edmonton Prolife



## Upcoming Events



- **July 19 -28 2007 – Capital Ex**  
Edmonton Prolife will once again be having an information booth at Capital Ex. We will need over 60 volunteers to make this fun, public education opportunity a reality. This is a very relaxed way to spread the prolife message. Your admission is paid for and you are welcome to enjoy the day at Capital Ex prior to and after your shift! If you would like to volunteer for a shift, please call Karen at 425-1637.
- **The Catholic Organization on Life and Family (COLF)** will hold a national symposium on Theology of the Body in Edmonton June 15-16 at the Shaw Conference Centre. The theme of the conference will be “Towards a New Sexual Revolution.” This symposium is designed for teachers, parents, youth, resource people and anyone interested in the writings of Pope John Paul II on a coherent explanation of human sexuality. COLF has extended the Early Bird fee until May 14<sup>th</sup>. For all the details and to register, go to [www.colf.ca](http://www.colf.ca).
- **Join others in an hour of peaceful, prayerful activism against the daily slaughter of innocent babies. Morgentaler Abortion Clinic: 12490, 109 A Ave.**  
Every Wednesday from 10:00 am to 11:00 AM  
The third Sunday of every month. Candle light Rosary at 7:30 pm. Contact Maryellen at 476-4026

For information on any of the above events, call the Edmonton Prolife office at **425-1637** or email us at [edmpl@interbaun.com](mailto:edmpl@interbaun.com)

## Edmonton Prolife introduces its new board

**A Huge Welcome to the New Board of Edmonton Prolife. The organizational meeting takes place June 11, 2007. We will let you know who will fill the positions of president, secretary and treasurer.**

**Corry Morcos** – Currently serving as Edmonton Prolife President. A very dedicated and faithful Edmonton Prolife supporter.

**Glenn Woolger** – Currently serving as treasurer for Edmonton Prolife. A very dedicated volunteer and faithful Walkathon route organizer.

**Anne Wansink** – Currently serving as secretary. Anne has been involved with pro-life work for a very long time. She is a registered nurse and we are very happy to have her on our board.

**Michael Cooper** – Currently serving as director. Michael is a law student studying at the University of Alberta. We value Michael's reasoned approach to our work.

**John MacDonald** – Currently serving as director. John is the Chair of the Family Life Committee of the Edmonton Roman Catholic archdiocese. We value the opportunity to network with John and other groups.

**Katherine Richter** – Katherine is a mom and works at RBC. Katherine is fairly new to the pro-life movement, although always knowing she was pro-life. She is now ready to become actively involved at the board level. We value Katherine's understanding of the pro-life issues and look forward to having her on board.

**Janet MacLellan** - Janet is a long time supporter of the pro-life movement. She is a dedicated volunteer willing to help in any way she can. She presently works as a receptionist and has an online Catholic book store.

**Rachel Dueck** – When you meet Rachel you will immediately be convinced of her passion and sincerity with regards to the pro-life movement. Originally from 'down east' she remembers getting up at 5 in the morning and driving 5 hours to attend the March for Life and then return home in the same day. That's commitment. Rachel currently works for EPL, that's Edmonton public libraries.

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Editor: Karen Richert

EPL Board: President: Corry Morcos, Treasurer: Glenn Woolger, Recording Secretary: Anne Wansink, Directors: Judy Koopmans. Michael Cooper and John MacDonald

Office Manager: Karen Richert

Webmaster: Eileen Rebstock

New board members welcomed. Meetings held bimonthly first Tuesday, 5:30 pm, at EPL office. All EPL members welcome to attend

# Stem Cells Made Easy –

Reprinted from [www.physiciansforlife.org](http://www.physiciansforlife.org)

Many well-meaning people have become very confused and overwhelmed by the muddled media reports about stem cells, unintentional or otherwise.

Here is a quick, simplified outline to help clear the air about stem cells. There are two Major Types of Human Stem Cells:

## 1. Embryonic Stem Cells (ESCs)

Human egg and sperm are combined in the lab to make a fertilized human zygote. This human zygote is then allowed to divide to about the 8-cell stage and then it is destroyed for the stem cells. To destroy human life at any stage has always been considered immoral and unethical.

Not one -- not even one -- successful human treatment with embryonic stem cells has yet occurred. To the contrary, medical tests using embryonic stem cells have actually had disastrous results. ESC often grow uncontrollably and have produced tumors in people that have caused death or serious damage.

## 2. Non-Embryonic Stem Cell

Non-Embryonic Stem Cells do not result in the death of a human being and so are considered a morally and ethically acceptable source of stem cells.

There are several sources for Non-Embryonic Stem Cells:

- a. Adult Stem Cells (ASCs)
- b. Newborn Placental (afterbirth) Stem Cells
- c. Newborn Umbilical Cord Blood Stem Cells

Adult Stem Cells (ASCs) can be obtained from any person's blood, fat tissue, bone marrow, muscle tissue -- even from baby tooth pulp and recently from heart muscle tissue. Stem cells can be coaxed in the lab into many other types of cells, including nerve cells.

Adult stem cells are being used now, and have already been used in dozens of research studies. Literally hundreds of successful medical treatments have taken place using adult stem cells. Because of the tremendous success of adult stem cell research, scientists are very excited about all the possible medical treatments that ASCs will be able to accomplish in the future.

Now that researchers have been studying them for awhile, they know where to find them. The ASCs are found more frequently in damaged areas in the body. As one scientist noted (paraphrased), "You look for an ambulance near an accident."

For decades, we have been performing bone marrow transplants. Now we understand that stem cells are involved in the success of those transplants.

A great advantage of ASCs is that when they are used for transplants they are from the same person they are used to heal; thus, there are no rejection problems.

ASCs have recently been used in studies to treat damaged hearts. The ASCs are located, removed, multiplied, and returned to the patient. Improvement in patients who received ASCs was significantly better than in patients who did not receive the ASC treatment.

Placental Stem Cells and Umbilical Cord Blood Stem Cells are also showing great potential. Umbilical Cord Blood Stem Cells can be stored indefinitely in Cord Blood Banks.

At this time, most hospitals do not mention to parents that their children's placental and umbilical cord blood can be stored in blood banks. Only about 1% of this vast source of stem cells is now being stored. Some legislation is pending which would require that hospitals inform parents of this option.

## Do Pro-life people support Stem Cell Research? Absolutely!

Talk about confusion. The minute someone brings up the topic of stem cell research the immediate conclusion is that pro-life people do not support stem cell research. Nothing could be farther from the truth. As pro-life people we support all ethical forms of treatment and research. The biggest clarification that needs to be made is that pro-life people support adult stem cell research, which is not only ethical but very successful. After 25 years of research over 73 successful treatments or cures have been created. Pro-life people cannot support embryonic stem cell research. Not only is this unethical, as it destroys a human life, it has yet to yield any successful treatment or cure.



# Do No Harm: The Coalition of Americans for Research Ethics-

An interview with David Prentice - founding member and Nigel Cameron, an expert on emerging medical technologies

## Do No Harms' objectives are

To advance the development of medical treatments and therapies that do not require the destruction of human life, including the human embryo.

To educate and inform public policy makers and the general public regarding these ethically acceptable and medically promising areas of research and treatment.

To support continuation of federal laws prohibiting the federal funding of research that requires the destruction of human life, including the human embryo.

"We keep hearing about the promise of embryonic stem cells, but the claims are simply unsubstantiated.

At this point in time there is little evidence of the effectiveness of embryonic stem cells. Proponents have yet to take even one dish of embryonic stem cells and have these cells change into one specific cell, i.e., a heart cell or brain cell. Based on experiments to date, it's not safe to even try and apply them to patients."

"The bottom line," continued Dr. Prentice, "is that our real promise lies not in the use of embryonic stem cells but with adult stem cells. Adult stem cells are today already at work in patients. I can document, through published scientific papers, with over 65 human diseases, where patients are better already, having been effectively treated through adult stem cells."

"Some scientists admit there are ethical concerns in the use of embryonic stem cells," Dr. Prentice said. "But, these same scientists continue to ignore the success in patients and the use of adult stem cells. The debate is ongoing. We face a lot of challenges, but the key question remains, 'What does it mean to be human, and what kind of values do we give to any human life, whether it be a little embryo, a fetus in the womb, a newborn or someone at the other end of their life with advanced Alzheimer's?'"

"We must value every human life," he added. "We need to push ethical science. We have an ethical problem in one sense, to make sure that everyone

knows the real facts about the stem cell debate. The ethical question is that you have to kill a human embryo, a young human life, in order to obtain an embryonic stem cell. What we are dealing with is a human being at its earliest stage of life.

Nigel Cameron, an expert on emerging medical technologies, said, "They (scientists) have the idea that stem cells are miracle cures and if only we were able to work on them, we would cure incredible diseases in the next year or two's time."

Cameron says people believe that stem cells from destroyed human embryos are the answer.

But new evidence shows that it's the so-called 'adult stem cells' -- like those from umbilical cord blood -- that are providing the only human success stories.

Colin McGuckin and his team at the University of Newcastle in England have been turning those cells into pancreas cells for possible diabetic treatments.

"Twenty years ago," said McGuckin, "the first umbilical cord blood transplant took place -- and was actually treating people with serious diseases like leukemia. Today, we've actually got over 75 diseases and conditions which are treatable using cord blood stem cells."



There are results now with using a child's own saved cord blood. Last summer we told you about Ryan Schneider. Those stem cells reversed his brain affliction, cerebral palsy. He's now able to play, eat, and talk like other children.

And other kinds of adult stem cells? Marie Carty suffered from chronic heart failure. When stem cells from her blood were processed and injected into her heart, her cardiac health improved dramatically.

Scientist and policy analyst David Prentice says results like this are becoming more common. Prentice said, "One way to measure it is -- how many different diseases have you already seen some results with, in human patients? And if you look at it, the score is at least 72 to zero -- adult has 72, embryonic has zero."

But some scientists argue that embryonic cells are more versatile and will be the best bet eventually.

To that Cameron says, "I certainly wouldn't say embryo stem cells will never cure anybody. Certainly what seems to be the case is that it will take a long time before we know whether they will cure people. And the question, of course -- which is the ethical question -- is how you get the embryo stem cells?"

Public confusion is an underlying problem, Cameron says. The media have misled the public and given embryonic stem cells a glamorous image, despite the

reality. "Whenever you see a report of stem cells curing anybody, you can be absolutely 100-percent certain that these are so-called adult stem cells; they're not stem cells from embryos," Cameron explained. Prentice said, "What becomes very clear, though, is that hope is distant, at best, with embryonic stem cells."

We need to make sure we know the full facts and get out and talk about them with our friends, family and people at work. We have to write letters to the editor and to our legislators."

## Check the Score: Adult Stem Cells vs. Embryonic Stem Cells

### Benefits in Human Patients (from Peer-Reviewed Studies)

#### Adult Stem Cells

##### Cancers:

1. Brain Cancer
2. Retinoblastoma
3. Ovarian Cancer
4. Skin Cancer: Merkel Cell Carcinoma
5. Testicular Cancer
6. Tumors Abdominal Organs
7. Non-Hodgkin's Lymphoma
8. Hodgkin's Lymphoma
9. Acute Lymphoblastic Leukemia
10. Acute Myelogenous Leukemia
11. Chronic Myelogenous Leukemia
12. Juvenile Myelomonocytic Leukemia
13. Chronic Myelomonocytic Leukemia
14. Cancer Of The Lymph Nodes: Angioimmunoblastic Lymphadenopathy
15. Multiple Myeloma
16. Myelodysplasia
17. Breast Cancer
18. Neuroblastoma
19. Renal Cell Carcinoma
20. Soft Tissue Sarcoma
21. Various Solid Tumors
22. Ewing's Sarcoma
23. Waldenstrom's Macroglobulinemia
24. Hemophagocytic Lymphohistiocytosis
25. Poems Syndrome
26. Myelofibrosis

##### Auto-Immune Diseases:

27. Diabetes Type I (Juvenile)
28. Systemic Lupus

29. Sjogren's Syndrome
30. Myasthenia
31. Autoimmune Cytopenia
32. Scleromyxedema
33. Scleroderma
34. Crohn's Disease
35. Behcet's Disease
36. Rheumatoid Arthritis
37. Juvenile Arthritis
38. Multiple Sclerosis
39. Polychondritis
40. Systemic Vasculitis
41. Alopecia Universalis
42. Buerger's Disease

##### Cardiovascular:

43. Acute Heart Damage
44. Chronic Coronary Artery Disease

##### Ocular:

45. Corneal Regeneration

##### Immunodeficiencies:

46. Severe Combined Immunodeficiency Syndrome
47. X-Linked Lymphoproliferative Syndrome
48. X-Linked Hyper Immunoglobulin M Syndrome

##### Neural Degenerative Diseases

##### And Injuries:

49. Parkinson's Disease
50. Spinal Cord Injury
51. Stroke Damage

##### Anemias And Other Blood

##### Conditions:

52. Sickle Cell Anemia
53. Sideroblastic Anemia
54. Aplastic Anemia
55. Red Cell Aplasia
56. Amegakaryocytic Thrombocytopenia
57. Thalassemia
58. Primary Amyloidosis
59. Diamond Blackfan Anemia
60. Fanconi's Anemia
61. Chronic Epstein-Barr Infection

##### Wounds And Injuries:

62. Limb Gangrene
63. Surface Wound Healing
64. Jawbone Replacement
65. Skull Bone Repair

##### Other Metabolic Disorders:

66. Hurler's Syndrome
67. Osteogenesis Imperfecta
68. Krabbe Leukodystrophy
69. Osteopetrosis
70. Cerebral X-Linked Adrenoleukodystrophy

##### Liver Disease

71. Chronic Liver Failure
72. Liver Cirrhosis

##### Bladder Disease

73. End-Stage Bladder Disease

##### Embryonic Stem Cells

**NONE!**

# Cord Blood Banking

One of the ways that we can help to ensure that there will be a readily available supply of adult stem cells is to consider donating umbilical cord blood after the birth of a child. This type of cord blood banking is not for preservation of your child's cord blood for possible future treatment for your child, but is rather a donation to the public cord blood bank for use in research and the treatment of unknown recipients. This service is much like donating blood. I would encourage you to find out more.

The following article lists some of the most frequent questions that you may have about public cord blood banking. If you need more information please contact the Alberta Cord Blood Bank at Suite 408 College Plaza 8215 - 112 Street, Edmonton, Alberta, T6G 2C8 Tel: (780) 492 - 2673 or online at <http://www.acbb.ca/>

If you would like to know more about cord blood banking for your own child you should discuss this with your doctor, as the reasons and costs associated with this type of cord blood banking are varied and your doctor will be able to best advise you.

## Alberta Cord Blood Bank

The Alberta Cord Blood Bank is a non-profit organization dedicated to the collection and preservation of umbilical cord blood stem cells for public use. These cells are used for transplantation in individuals threatened by cancer, lethal congenital anemias and other disorders that can be treated with bone marrow transplantation.

What is an umbilical cord blood bank?

It is a special type of tissue bank that collects processes and freezes blood remaining in the umbilical cord after the birth of a baby.

Why does cord blood need its own bank?

Waste umbilical cord blood contains cells called stem cells. These cells are capable of producing blood when transferred into people who need transplantation to treat cancer or blood diseases.

When were these cells discovered?

Stem cells were discovered in umbilical cord blood in 1988. The first human transplant of these cells took place in Paris, France in 1989. Over 2000 transplants have been performed world-wide in children.

When was cord blood banking developed?

Dr. Pablo Rubenstein opened the first Cord Blood Bank at the New York Blood Center in 1992. Since then, several other Banks have been developed,

including the Alberta Cord Blood Bank, which opened in October of 1996.

How long can cord blood stem cells be stored?

Present technology allows storage for 10 years. However, research is underway to extend this period to 15 years.

Where else are blood forming stem cells found?

They are found in the bone marrow and the peripheral blood of human beings.

Is transplantation the only use for cord blood stem cells?

No. Transplantation is the first use for these novel cells. The prospects are good that they will be used for gene therapy to convey missing information into the cells of humans.

Who does bone marrow transplantation benefit?

Mostly patients with cancers and other blood disorders where the bone marrow fails to produce blood.

Is cord blood a better source of stem cells than bone marrow?

In some respects, cord blood is a better option. Because of their immaturity, the stem cells are less likely to attack other cells of the body (graft versus host disease). This reduces the illnesses associated with transplantation and makes the procedure more tolerable for the patient.

Are there advantages to the use of cord blood stem cells in unrelated transplantation?

Yes. This source of stem cells is inexhaustible. There is no risk to the infant donor or the mother; graft versus host disease is very minimal; the cells engraft easily even though their numbers are small, meaning cord blood contains a higher number of the right type of cells; and the risk for the transfer of viral diseases to the recipient is markedly reduced.

Are there disadvantages to cord blood transplantation?

Yes. The volume of stem cells per donation is small with the potential that not enough cells may be available for use in adults. Only one sample is available for use at any one transplantation. It is not possible to identify unknown disease from the donor samples at this time

Is donation harmful to the mother or the baby?

No. Collection does not interfere with the delivery process. Cord blood can only be collected after the mother and the infant are safe.

Is permission required to harvest the blood even though it is usually thrown away?

Yes. Permission is required from the mother. It is given by completing the Donor Registration Form and sending it to the Alberta Cord Blood Bank.

Who is eligible to donate cord blood stem cells?  
Any mother in Canada with a healthy full-term pregnancy.

Who is ineligible to donate cord blood stem cells?  
Families with a proven history of any genetic or blood disorder are ineligible to donate. Since this is an unrelated public cord blood bank, the highest standards of quality control are imposed to ensure that only safe stem cells are stored in the inventory of the bank.

Are all collections suitable for storage?  
No. Due to small volume, contamination, or poor conditions during transportation, some stem cells may not be suitable for storage.

When should I register with the Bank?  
Registrations will be accepted by mail until the 34th week of pregnancy.

What happens after I am accepted as a donor?  
You will be sent a collection kit to be taken to the hospital at the time of delivery. Following the collection, you will be asked to provide two tubes of maternal blood for testing. The ACBB makes all arrangements for the delivery of samples to Edmonton.

## **American College of Pediatricians Calls for End to Embryonic Stem Cell Research**

GAINESVILLE, May 14, 2007 (LifeSiteNews.com) - The American College of Pediatricians (ACP) has called for an end to embryonic stem cell research and recommends the exclusive support of already proven effective adult stem cell research. "Not only does embryonic research require taking the life of human embryos, it also prolongs needless suffering by delaying the development of more promising adult stem cell treatments and cures," stated Michelle Cretella, MD, Fellow of the American College of Pediatricians.

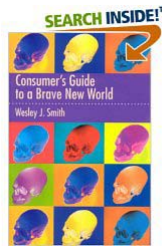
Research using non-embryo sources of stem cells, including amniotic fluid, umbilical cord blood, placenta and adult blood, fat and various organs, have yielded impressive results, the organization suggests.

"Adult stem cells are now routinely used in certain forms of cancer therapy. Over the last decade, these cells have been used to successfully treat spinal cord

injuries, heart failure, Parkinson's disease, diabetes and dozens of other conditions in human trials."

The group noted further that "This has not been the case with any embryonic stem cell trial. Instead, there have been catastrophic results with these cells producing the wrong tissue, forming tumors and triggering immune rejection."

Concluding the ACP said, "Every dollar spent on the failed and unnecessary process of embryonic stem cell research steals resources away from the established utility and potential of adult stem cell research. This is fiscally irresponsible and medically unconscionable."



## **Consumer's Guide to the Brave New World.**

Lawyer, author, and commentator Wesley J. Smith *Consumer's Guide to the Brave New World* addresses all of the key issues in order to provide a clear understanding of what's at stake in the public policy debate over human stem-cell research and cloning.

Smith discusses how and why embryonic stem-cell research receives lavish attention from the media and scientific community, while adult stem-cell research -- which is actually showing more promise in treating patients -- is downplayed or ignored.

He describes the emerging science of the radical new technology of human cloning and shows how it moves forward despite the moral consensus of the world against it.

At the core of this highly readable and carefully researched book is a report on the gargantuan "Big Biotech" industry and its supporters in universities, in scientific communities, and in the bioethics establishment.

Smith shows how the lure of huge riches, mixed with the ideology of "scientism," threatens to impose a "new eugenics" on a society that would dismantle ethical norms and call into question the uniqueness and importance of all human life.

"At stake," he warns, "is whether science will continue to serve society, or instead dominate it."

This book is available at the Athabasca University and may be requested online using the Alberta Library online [www.talonline.ca](http://www.talonline.ca) or use the Edmonton Prolife website, [www.edmontonprolife.org](http://www.edmontonprolife.org) and go to the resource section.

