

# Industry

## Dear Industry Stakeholder Group,

We are the National Committee on Embryonic Stem Cell Research. We have been given the responsibility of drafting legislation for our beloved country Adanac. Your group has been identified as having a particular interest in our country's ongoing embryonic stem cell debate, and we would very much like to hear from you.

We invite you to share your opinions on the following four issues:

- The use of embryonic stem cells from existing stem cell lines;
- The use of embryonic stem cells from discarded embryos from in vitro fertilization (IVF) clinics;
- The use of embryonic stem cells from embryos created by IVF solely for research; and
- The use of embryonic stem cells from embryos created by therapeutic cloning.

As you may or may not be aware, there are three legal possibilities for these activities. Under Adanac's constitution, an activity is either unrestricted, controlled (and must fulfill certain criteria in order to occur) or outright prohibited. For activities that you believe should be prohibited or controlled, please suggest an appropriate punishment. For controlled activities, describe the criteria the activity must meet before being granted permission. For example, a common view is that discarded embryos from IVF clinics should be available for embryonic stem cell research only if the donors of the embryos have given their consent. This activity would be classified as "controlled," and the criteria would be "donor consent required". Please provide a rationale for all of your classifications.

### TIMELINE

#### DAY 2:

In your group, choose one article to read overnight.

#### BETWEEN DAY 2 AND 3:

Read this letter. Read your article and complete this part of the worksheet.

#### DAY 3:

In your group, complete the worksheet and prepare your presentation.

#### DAY 4:

Present your views to the Committee.

To help you create your presentation, we have compiled a package of documents that represents the views of similar groups in different countries. These documents include speeches, press releases and articles. The package also contains a worksheet to help you identify the authors' stance. But be warned: You may run into conflicting views within this package. If this is the case, choose the view that you prefer.

Please begin your presentation by introducing yourself. We encourage you to be as persuasive and creative as possible. Remember, your opinions are helping to create legislation we must all abide by.

We very much look forward to seeing you. By sharing your views, you are facilitating Adanac's legislative process and making a valuable contribution to the future of embryonic stem cell research in our country.

Sincerely,

National Committee on Embryonic Stem Cell Research

## WORKSHEET

Use this worksheet to identify the subjects' stance on the four issues that must be addressed in your presentation to the Committee.

If the subject does not express an opinion, indicate what you expect their opinion would be.

	<b>Business.com</b> "US Biotech Give Cautious Welcome to Stem Cell Decision"	<b>San Francisco Business Times</b> "Biotech industry edges closer to stem-cell research"	<b>Biotechnology Industry Organization (BIO)</b> "Biotech Industry Supports Bush Decision"	<b>Biotechnology Industry Organization (BIO)</b> "Bio Supports Cloning Legislation"
Whose point of view is expressed in this document?				
What is their role in society?				
Position on use of embryonic stem cells from existing cell lines				
Position on use of embryonic stem cells from discarded embryos from IVF clinics				
Position on use of embryonic stem cells from embryos created by IVF for research				
Position on use of embryonic stem cells created by therapeutic cloning				

# US Biotechs give cautious welcome to stem cell decision

*By Josephine Cumbo in London*

*Published: August 10 2001*

The US biotechnology industry has been described by President George W. Bush's decision to allow limited funding for stem cell research as a "good, clear, balanced outcome" but added it had reservations about his position.

In a televised address to the nation on Thursday, President Bush said that the federal government would back stem cell research, but only on embryos that had already been harvested and examined by scientists.

Mr. Bush said 60 cell "lines" of embryonic stem cells had already been developed in US laboratories, and federal funds would only be used for further studies on those cells.

In a statement, the US Biotechnology Industry Organization, which represents more than 100 biotechnology companies, said it was pleased the President had recognised the value of stem cell research.

It said the decision was a "major step forward" for the industry and for patients who suffered from diseases such as Alzheimer's and Parkinsons, for which there is no cure, currently.

However, Carl Feldbaum, BIO President, was critical of Mr. Bush's decision to place conditions on research.

"Placing a limit on the number of cell lines available for research may place roadblocks to medical progress, some of which may take years to overcome," he said.

Despite Mr. Bush's stand, Mr. Feldbaum said the industry believed the issue over limits "will be worked out in time".

Shares in companies likely to qualify for federal funding shot up Friday, following Mr. Bush's announcement.

BressaGen, an Australian biotech which hold four of the 60 limited cell lines approved for research, rose 13 per cent to close at 94 cents on Friday.

"BressaGen now becomes one of the few private or public research groups in the world with cell lines that qualify for National Institute of Health funding," the group said.

Stock in US companies involved in stem cell research also soared ahead of Mr. Bush's announcement on Thursday.

StemCell, a California-based company which aims to create cell-based treatments of diseases of the central nervous system, liver and pancreas, rose 30 per cent on Nasdaq.

Source: FT.com

**EXCLUSIVE REPORTS**

**BIOTECH INDUSTRY EDGES CLOSER  
TO STEM-CELL RESEARCH**

Daniel S. Levine

While Congress considers legislation that would impose a 10-year prison sentence and a \$1 million fine for anybody caught cloning human embryos, California is considering legislation that could allow the state to become a haven for embryonic stem cell research.

Last fall, California passed legislation meant to make a policy statement about the state's support of embryonic stem cell research. Now lawmakers are deciding whether it will back those words with the money and mechanism to do it.

"The desire to establish state funds for stem cell research, especially for the kinds that are permitted in California, but certainly not funded by the U.S. government or any of its agencies, is important and may be the only way to get this research going," said Irv Weissman, professor at Stanford Medical School and director of the Stanford Institute for Cancer/Stem Cell Biology and Medicine.

The Bush administration already restricted federal funding for human embryonic stem cell research to certain cell lines already in use. The threat of additional prohibitions, including criminalization of the research, has steered researchers away from the work and sent others overseas to conduct work in more welcoming settings.

"Whether it's how disease works or the origins of disease, it's part of this same freedom of research that this country has traditionally funded," said state Sen. Deborah Ortiz, D-Sacramento, who has introduced a set of bills to promote stem cell research in California. "Here we are not only not supporting it on a federal level, but also proposing to criminalize it. It's such an odd ideological position that drives such important policy."

The Roman Catholic Church and anti-abortion groups oppose human embryonic stem cell research because to extract the cells requires the destruction of an embryo, which some see as tantamount to murder.

But researchers believe work with embryonic stem cells, which can develop into virtually any specialized cell within the body, could lead to treatments for a broad range of health problems ranging from spinal injuries to diabetes as well as provide an understanding for the mechanism of genetic-based diseases. If passed, the legislation could help establish the Bay Area as a leading center for stem cell research and commercialization of it.

"This is a very exciting area with tremendous potential. What California is trying to do in these bills is really leading the nation in this area," said Sandra Fried, a legislative director for the University of California. "California is at the forefront."

## GUIDELINES AND FUNDING

The Ortiz bills passed the Senate Committee on Health & Human Services last month and are pending in the Senate Appropriations Committee.

One bill, SB 778, would create a mechanism for funding facilities and research for stem cells through general obligation bonds. No amount has been attached to the legislation yet, but capitol staffers say funding could add up to \$1 billion over a 10-year period. The funding would be available to private and public sector researchers.

Companion bill SB 332 would establish a research council that would develop guidelines for stem cell research in the state, and SB 771 would establish a state-level embryo registry for stem cell research.

Supporters of the bills include research institutes and life science industry organizations. Opponents, which include California Pro-Life Council, California Catholic Conference and the Campaign for California Families, said they don't oppose the use of adult stem cells, but said the use of human embryonic stems cells is a case of the ends not justifying the means.

"Pro-life people and their families suffer from the same diseases and complications of life as everyone else. We have disabled members. We have children and family members with diabetes and Parkinson's and Alzheimer's," said Jan Carroll, legislative analyst for the California Pro-Life Council. "We simply have a sense of horror that we would be attempting to cure these people by killing another human being in order to derive what they think they need to do that."

## CHALLENGE AHEAD

The bond measure requires a two-thirds majority to pass. If successful, it would then have to muster a two-thirds majority in a statewide election before it could be implemented. "Clearly moving the bond bill through the Senate, let alone both houses is going to be a challenge because of the politics of stem cell research," said Ortiz. "Additionally, with California's financial situation, new indebtedness can be a challenge as well.

"This is an effort to raise the issue and see if it gets through the Legislature this year and work through the policy issues."

**Source: San Francisco Business Times**

<http://sanfrancisco.bizjournals.com/sanfrancisco/stories/2003/05/12/story3.html>

## **BIOTECANADA WELCOMES NEW LEGISLATION REGARDING REPRODUCTIVE TECHNOLOGIES, BUT URGES CAUTION TOWARDS THE HALTING OF POTENTIAL LIFE SAVING RESEARCH**

**OTTAWA, MAY 9 /CNW/** - In response to federal legislation introduced today in the House of Commons by the federal Minister of Health Anne McLellan, BIOTECanada, the national non-profit biotechnology association, offered insight as to the implications of this new legislation.

"We are pleased to see this important legislation before our federal legislators. Canada's researchers will benefit from the framework and certainty the legislation will provide for their work," commented Janet Lambert, President of BIOTECanada. "We encourage our parliamentarians to view this legislation as a vital step towards ensuring Canadians gain the benefit of promising new treatments and potential cures for anyone suffering from serious illness or disease, while meeting the needs of our social fabric."

Ms. Lambert continued, "We understand this legislation brings forward many important ethical and moral issues for Canadians to consider. An element of those issues relates to how we continue, and not eliminate our ability to research treatments and potential cures for infertility and such a wide variety of illnesses like heart disease, spinal cord injuries, diabetes, Parkinson's and cancer."

In March 2002, BIOTECanada releases a Statement of Ethical Principles, approved by their Board of Directors which outlined clearly their opposition to human cloning. The preamble of the Statement includes:

While biotechnology can greatly improve the quality of life, we recognise that this new technology should be approached with an appropriate mixture of enthusiasm, sensitivity to social issues, and acknowledgement of the potential and power of biotechnology.

Ms. Lambert commented "With the great milestone of the mapping of the human genome the potential for increasing knowledge of ourselves, and the world we live in has virtually exploded. We have never before had the potential to create treatments and cures for debilitating illnesses that in so many cases take such a toll on many of our lives and those of our families."

In partnership with our universities and governments, Canadian biotechnology researchers and innovators have grown this industry to historic levels. Canada is currently the second largest and most successful country in the world developing vital biotech research, products and processes. Of the almost 400 biotechnology companies in Canada, approximately 150 are dedicated specifically to human health research and development. This sector also leads Canada's biotech product exports, revenues and research and development spending. Canada has become pre-eminent in the fields of genetics, cancer, cardiovascular diseases and specializing in treatments for neurodegenerative diseases, bone disease and viral infections.

In closing, Janet Lambert offered, "It is important for all Canadians and all parliamentarians to work towards final legislation that is reflective of the entire human condition, while respecting our collective social and moral values we hold as a nation."

BIOTECanada is the national association representing the biotechnology industry and research community in Canada. BIOTECanada represents Canadian health care, agricultural, food, bioinformatics, research institutions and other organizations dedicated to the long term and sustainable development of a Canadian biotechnology industry, its practices and products.

As a national association, it is served by a volunteer board composed of representation from the wide variety of its membership.

**Source: BIOTECanada**  
<http://www.newswire.ca/releases/May2002/09/c3854.html>



## **BIO SUPPORTS CLONING LEGISLATION THAT "PROTECTS OUR ETHICS AND OUR SCIENCE"**

WASHINGTON, July 30, 2001 /PRNewswire/ -- Today Biotechnology Industry Organization President Carl B. Feldbaum released the following statement at a press conference called by Rep. Peter Deutsch (D-Fla.) and Rep. James Greenwood (R-Pa.) in support of legislation that bans human reproductive cloning while continuing vital therapeutic cloning research:

"I'd like to express the biotechnology industry's strong support of the 'Cloning Prohibition Act of 2001,' H.R. 2608, sponsored by Reps. James Greenwood and Peter Deutsch.

"This bill is a thoughtful piece of legislation that strikes a careful balance between banning an unsafe and unethical application of technology -- while allowing critical scientific research to continue.

"Many of us here today can agree that using cloning technology for human reproductive purposes is morally repugnant -- it is also dangerous.

"It took scientists more than 270 attempts to create the ovine breakthrough known as Dolly. It would be unethical and reprehensible to apply those odds to humans -- and those so-called scientists who claim they can and will are frankly an insult to responsible medical research.

"However, in the quest to prohibit the cloning of a human being, it is critical that we protect the appropriate and important uses of cloning technology.

"The National Institutes of Health recently recognized that cloning technology could help unleash the full potential of stem cell research.

"At the intersection of these two fields -- cloning technology and stem cell research -- may lie the creation of insulin-secreting cells for diabetics, nervous system tissue for spinal cord injury victims and a variety of other treatments for devastating illnesses, including Parkinson's disease, heart disease, multiple sclerosis, and various cancers.

"The 'Cloning Prohibition Act of 2001,' introduced by Reps. Greenwood and Deutsch, bans all human reproductive cloning but allows the use of cloning technology for therapeutic research. This is not knee-jerk legislation -- it is wise and balanced legislation, which has the strong support of the Biotechnology Industry Organization, numerous scientific and medical groups as well as the significant and vital support of many patient organizations.

"Legislators who show fortitude in making delicate decisions that affect medical progress and human ethics -- legislators such as Reps. Greenwood and Deutsch -- deserve our support. They have taken the time to thoroughly examine critical scientific issues, and develop balanced legislation that protects our ethics and our science.

"H.R. 2608 deserves Congressional support."

BIO represents more than 1,000 biotechnology companies, academic institutions, state biotechnology centers and related organizations in all 50 U.S. states and 33 other nations. BIO members are involved in the research and development of health care, agricultural, industrial and environmental biotechnology products.

**Source: Biotechnology Industry Organization**  
<http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=105&STORY=/www/story/07-30-2001/0001544709>



## PRESENTATION GUIDE

This table contains all of the topics that must be included in your presentation to the Committee. Use this table to record your proposals.

When presenting your proposals to the committee be as creative as possible. In other words, do not simply present this table.

<b>ACTIVITY</b>	<b>LEGAL STATUS</b> (prohibited, controlled or unrestricted)	<b>CRITERIA</b> (only for controlled activities)	<b>PUNISHMENT</b> (only for prohibited or controlled activities)	<b>REASON</b> (for all)
Use of embryonic stem cells from existing cell lines				
Use of embryonic stem cells from discarded embryos from IVF clinics				
Use of embryonic stem cells from embryos created by IVF for research				
Use of embryonic stem cells from embryos created by therapeutic cloning				