

Son of former President Reagan enters the fray with a speech at the Democratic convention

By Judith Graham, Tribune staff reporter. Tribune national correspondent Vincent J. Schodolski in Los Angeles contributed to this report

July 27, 2004

Jim Kress, a Wisconsin businessman, calls himself a Republican. But on Tuesday evening he plans to watch the Democratic National Convention and listen to Ron Reagan's speech about stem cells.

For Kress, 75, who has had Parkinson's disease for 18 years, it will be a chance to reflect on the future of medical research, an issue he thinks Republicans are handling badly.

For Reagan, son of the late Republican president, it's an occasion to explain what many see as the scientific promise of embryonic stem cells--highly adaptable cells that many scientists believe could one day lead to therapies or cures for Alzheimer's, the disease his father had, as well as for diabetes and Parkinson's.

For the Democrats, Reagan's speech will be an extraordinary crossover moment, an opportunity to bask in the political glow surrounding the former president and his family while suggesting that the Democratic Party stands with a majority of Americans on the most important scientific debate of this election.

It's going to be "enormously important," said Sen. Ron Wyden (D-Ore.), and a "huge step forward" in raising awareness of stem cell research.

For opponents of embryonic stem cell research, who believe medicine and morality are falling victim to hype, Reagan's speech is viewed as somewhat unseemly.

"It's a political ploy trying to trade on his father's name," said David Prentice, senior fellow at the Family Research Council.

But Prentice doesn't dismiss the importance of the issue. When, as expected, President Bush squares off against Sen. John Kerry (D-Mass.) in debates this fall, "stem cell research is going to ... be on all the lists of questions," he said.

Few issues touch so many people: Nearly 100 million Americans are believed to have illnesses that might be aided by stem cell research--or have friends or family members with such illnesses.

"People who care about this issue are as passionate, informed and focused as

I've ever seen ... [and] the level of interest in this is as great as I have experienced with any science issue in all my years in public service," Wyden said.

In the debate over stem cells, Americans' commitment to scientific innovation runs smack into their respect for life and their disagreement over when it begins.

These are the grounds for opposition to research using embryonic stem cells, which come from human eggs frozen soon after fertilization, before any cell specialization has occurred. Because the process of extracting stem cells destroys the embryos, opponents view this research as a destruction of human life. Proponents argue that these embryos--a mass of fewer than 100 cells--are not worth more than the life and health of millions of Americans that might be helped by stem cell therapies.

Bush has tried to strike a balance between these competing points of view. In November 2001, he limited the number of embryonic stem cell lines eligible for federal funding to the 78 lines--or families of cells derived from a single embryo--that existed at that time.

So far, only 21 of those lines are available to researchers.

"Can I tell you with certainty that the 21 lines now available allow us to reach full and ultimate clinical benefit from embryonic stem cell research? I don't know," said Dr. James Battey, who directs stem cell research for the National Institutes of Health. "Is it possible we will reach a day when we feel we need more lines? Yes, there is indeed a possibility that day will come and maybe come in the next few years, but I don't believe that day is today."

Battey said research involving adult and embryonic stem cells is important. Some groups have argued that adult stem cells, which come from mature organs and don't involve the destruction of embryos, show great scientific promise and should be a stronger focus of such research. But embryonic cells have unique properties--they apparently multiply without restriction and appear better able to become any tissue in the body--and their potential should be explored, Battey said.

To facilitate research, the NIH earlier this month announced plans to create a national embryonic stem cell repository including all federally funded lines and to establish three new research centers that will help translate stem cell research into useful therapies.

Bush believes the current policy "provides a balanced approach to explore the promise of this exciting science in an ethical and moral fashion," said White House spokesman Trent Duffy. "Life should not be created just to be destroyed or used for spare parts."

Critics say the administration is not doing enough to support a rapidly developing science that needs more freedom to explore some 200 embryonic stem cell lines now reported to exist around the world.

Last month, Kerry put himself in the "we-need-to-do-more" camp, vowing in Denver to "tear down every wall today that keeps us from finding the cures of tomorrow."

Researchers such as Chicago geneticist Yuri Verlinsky are creating new stem cell lines from frozen embryos stored in fertility clinics in cases where the parents no longer want the embryos and have agreed to donate them to science.

Most of the new cell lines created during the past three years have been developed by private companies, many of them outside the United States. These have begun to include disease-specific embryonic stem cell lines for conditions such as muscular dystrophy. Researchers want to see how these diseased cells develop when compared with normal cells. This will make possible new therapies and perhaps even cures, said Dr. Robert Goldstein, chief scientific officer of the Juvenile Diabetes Research Foundation.

Some 206 members of the House of Representatives and 58 senators have written to the Bush administration this year, asking it to ease restrictions on federal funding and allow scientists to work with more embryonic stem cell lines.

The University of Chicago, the University of Illinois and more than 130 other academic institutions, patient groups, medical organizations and scientists have urged similar changes.

If there is a political advantage for Democrats in the stem cell debate, it could be its potential to serve as a wedge issue, perhaps attracting independent voters and moderate Republicans, analysts say.

A June poll conducted by Opinion Research Corp. on behalf of the Civil Society Institute indicated that three-quarters of Americans support research involving embryonic stem cells. The survey of 1,017 adults also showed that three-quarters of respondents--including 6 in 10 conservatives--supported former First Lady Nancy Reagan's call for fewer restrictions on the research.

The debate over stem cell policy also is playing out in many states.

When California voters go to the polls Nov. 2 to help choose the next president, they will also consider a ballot initiative to establish a \$3 billion state-run facility for embryonic and adult stem cell research.

New Jersey became the first state to endorse stem cell research earlier this year. In Illinois, a bill endorsing stem cell research--renamed the Ronald Reagan Biomedical Research Act following the former president's death in June--is stalled in the legislature. Harvard University, Stanford University and the University of Wisconsin are among the academic institutions establishing stem cell research centers.

In Green Bay, Wis., Kress, chairman of Green Bay Packaging, often finds himself frustrated when discussing stem cell research with his Republican friends.

"They tell me, 'I'm pro-life,' and I tell them, 'Pro-life has nothing to do with it.' This is something else altogether. This is a question of: Are we going to flush these unwanted frozen embryos down the drain, or are we going to use them to help people?" said Kress, who said he probably will vote for Kerry because of this issue.

- - -

Possibly vast potential vs. ethical concerns

How cells are obtained

In the United States, embryos used for stem cell research are housed in fertility clinics and frozen a few days after fertilization. The process of harvesting the potential stem cells destroys the embryo, and some people say this constitutes the destruction of human life. Proponents say these embryos would perish anyway, since they're routinely destroyed if their donors decide they don't want them. Donating the embryos to science is an ethical alternative, proponents say.

Adult vs. embryonic cells

Research is being conducted using stem cells from adults and from embryos. Some experts argue that the potential of adult stem cells should be explored before the government considers expanding support for the more controversial research involving embryonic stem cells.

Last year, University of Minnesota researchers showed for the first time that stem cells derived from adult bone marrow and injected into a mouse could differentiate into all major cell types found in the brain.

New research, however, calls into question whether adult stem cells actually differentiate into various cell types or whether they instead "fuse" with existing cells when injected into an organ, according to Mary Hendrix, president of Children's Memorial Institute for Education and Research in Chicago.

Adult stem cells are more difficult to isolate than embryonic stem cells, their ability to multiply is limited, and "they appear to have a more limited capacity to differentiate into different cell types," said Dr. James Battey of the National Institutes of Health.

Privatization of research

In the wake of restrictive federal policies, a substantial amount of research on embryonic stem cells is being sponsored by private companies and organizations outside the United States. Supporters of the government's policies say this is the free market working the way it should, but critics complain that this impedes the flow of knowledge in an exploding area of science.

While some private entities have been generous--Harvard's Douglas Melton earlier this year offered 17 new embryonic stem cell lines to researchers--others are secretive and unwilling to share research results, critics say.

Also, private companies may have little incentive to develop therapies that would benefit primarily poor or disadvantaged populations. Researchers worry that the U.S. may lose its scientific edge to other nations with less restrictive stem-cell policies, including South Korea and Britain.

Assessing the potential

Increasingly, opponents of embryonic stem cell research argue that potential therapies aren't safe or don't live up to the hype. This was the theme of a June commentary in the Chicago Tribune by Daniel McConchie of the Bannockburn-based Center for Bioethics and Human Dignity. Opponents emphasize that embryonic stem cells can cause tumors and immune system reactions when injected in animals.

But Dr. Robert Goldstein, chief scientific officer of the Juvenile Diabetes Research Foundation, says this science is in its infancy. Human embryonic stem cells were first isolated in 1998; research on human adult stem cells has been underway for three decades. "This is very tough, very complicated work that may take many years to yield results," Goldstein said.

-- Judith Graham

Copyright C 2004, Chicago Tribune <<http://www.chicagotribune.com/>>