PROPOSITION

71

Stem Cell Research. Funding. Bonds. Initiative Constitutional Amendment and Statute.

OFFICIAL TITLE AND SUMMARY

Prepared by the Attorney General

Stem Cell Research. Funding. Bonds. Initiative Constitutional Amendment and Statute.

- Establishes "California Institute for Regenerative Medicine" to regulate stem cell research and provide funding, through grants and loans, for such research and research facilities.
- Establishes constitutional right to conduct stem cell research; prohibits Institute's funding of human reproductive cloning research.
- Establishes oversight committee to govern Institute.
- Provides General Fund loan up to $3 million for Institute's initial administration/implementation costs.
- Authorizes issuance of general obligation bonds to finance Institute activities up to $3 billion subject to annual limit of $350 million.
- Appropriates monies from General Fund to pay for bonds.

Summary of Legislative Analyst's Estimate of Net State and Local Government Fiscal Impact:

- State cost of about $6 billion over 30 years to pay off both the principal ($3 billion) and interest ($3 billion) on the bonds. Payments averaging about $200 million per year.
- Unknown potential state and local revenue gains and cost savings to the extent that the research projects funded by this measure result in additional economic activity and reduced public health care costs.

ANALYSIS BY THE LEGISLATIVE ANALYST

Background

Stem Cell Research. A stem cell is a type of cell found in both animals and humans that has the potential to develop into many different types of specialized cells in the body. Scientists have conducted research on stem cells to better understand how animals and humans develop and how healthy cells replace damaged cells. This research has led to the development of treatments of a variety of cancers and blood disorders. Some scientists believe that stem cell research may, at some point in the future, result in new treatments of diseases. (See the nearby box for additional information on stem cell research.)

California law currently permits research involving stem cells. The University of California (UC) is currently engaged in this type of research. The exact amount of UC research funding devoted to stem cell research could not be determined, but the available information suggests that the total funds spent for these purposes range from the millions of dollars to the tens of millions of dollars annually.

The federal government provides funding for research that uses different types of stem cells, including adult and embryonic stem cells. In the 2002 federal fiscal year, the federal government dedicated more than $180 million in funding for stem cell research conducted nationwide. The federal government currently places certain restrictions on funding for research that uses embryonic stem cells.

State law currently prohibits human reproductive cloning, a process to create a human that is an exact genetic copy of another.

General Obligation Bonds. The state generally uses general obligation bond funds to finance major state capital outlay projects. General obligation bonds are backed by the state, meaning that

ANALYSIS BY THE LEGISLATIVE ANALYST (CONT.)

STEM CELLS AND STEM CELL RESEARCH

What Are Stem Cells? As described by the National Institutes of Health, stem cells differ from other cells in three main ways. First, they are "unspecialized," meaning they do not perform specialized functions, such as the way heart muscle cells help blood flow or red blood cells carry oxygen through the bloodstream. Second, under certain conditions, they can be transformed into cells with specialized functions. Third, these cells are capable of reproducing themselves over an extended period of time. As a result, these cells can serve as a repair system for the body by replenishing other cells for as long as the person or animal is alive.

What Are Embryonic and Adult Stem Cells? Human embryonic stem cells appear in an embryo, a fertilized human egg, five to seven days after conception. They are ordinarily extracted from extra embryos that have been donated for research by parents who tried to conceive a child through certain procedures performed at fertility clinics. Embryonic stem cells have the potential to develop into all cell types of the body.

Adult stem cells are obtained for scientific research from many organs and tissues including the brain, bone marrow, blood vessels, skin, and the liver. These stem cells are generally limited to becoming the cell type of its tissue of origin.

Why Do Researchers Want to Study Stem Cells? Scientists indicate that there are many ways in which human stem cells can be used in basic and clinical research. Stem cell research may provide information on the complex events that occur during human development that lead to serious medical conditions like cancer and birth defects. Human stem cells could be used to test the safety of drugs. Also, researchers indicate that stem cells offer the possibility of a renewable source of replacement cells and tissues to treat diseases such as Parkinson's, Alzheimer's, heart disease, or diabetes, or to treat spinal cord injuries.

the state guarantees payment of the principal and interest costs on these bonds. General Fund revenues are used to pay these costs. These revenues come primarily from the state personal and corporate income taxes and the sales tax. For more information regarding general obligation bonds, please refer to the section of the ballot pamphlet entitled "An Overview of State Bond Debt."

PROPOSAL

The measure authorizes the state to sell $3 billion in general obligation bonds to provide funding for stem cell research and research facilities in California. A new state medical research institute would be established to use the bond funds to award grants and loans for stem cell research and research facilities, and to manage stem cell research activities funded by this measure within California. The major provisions of the measure are discussed below.

New State Institute Created. This measure would establish the California Institute for Regenerative Medicine to award grants and loans for stem cell research and research facilities. The institute would also be responsible for establishing regulatory standards for stem cell research funded by the grants and loans and managing such research and the development of related facilities. The institute could have a staff of up to 50 employees who, under the measure, would be exempt from state civil service requirements.

The institute would be governed by a 29-member Independent Citizen's Oversight Committee (ICOC), comprised of representatives of specified UC campuses, another public or private California university, nonprofit academic and medical research institutions, companies with expertise in developing medical therapies, and disease research advocacy groups. The Governor, Lieutenant Governor, Treasurer, Controller, Speaker of the Assembly, President pro Tempore of the Senate, and certain UC campus Chancellors would make the appointments to the ICOC.

General Obligation Bond Funding. The measure would authorize the state to sell $3 billion in general obligation bonds, and limit bond sales to no more than $350 million per year. The measure states its intent, but does not require in statute, that the bonds be sold during a ten-year period. For at least the first five years after the measure took effect, the repayment of the principal would be postponed and the interest on the debt would be repaid using bond proceeds rather than the

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ANALYSIS BY THE LEGISLATIVE ANALYST (CONT.)

General Fund. Subsequent interest and principal payments after that five-year period would come from the General Fund. The proceeds from the bond sales would be placed in a new California Stem Cell Research and Cures Fund and used primarily to fund the various activities of the institute. The funds authorized for the institute would be continuously appropriated without regard to fiscal year.

Once the measure took effect, the institute would receive a $3 million start-up loan from the state General Fund for initial administrative and implementation costs. The institute would later repay the General Fund loan using the proceeds from the sale of bonds authorized under this measure.

How Funding Would Be Spent. Under the measure, any funding needed for various bond-related costs (for example, the cost of administering the bond sales) would be deducted before bond proceeds were spent for other purposes.

The institute would be able to use up to 3 percent of the remaining bond proceeds for general administrative costs and up to an additional 3 percent for administrative costs associated with grant-making activities. The remaining funds would be used for the grants and loans for research and research facilities.

Priority for research grant funding would be given to stem cell research that met the institute's criteria and was unlikely to receive federal funding. In some cases, funding could also be provided for other types of research that were determined to cure or provide new types of treatment of diseases and injuries. The institute would not be allowed to fund research on human reproductive cloning.

Up to 10 percent of the funds available for grants and loans could be used to develop scientific and medical research facilities for nonprofit entities within the first five years of the implementation of the measure.

Benefits From Royalties and Patents. The ICOC would establish standards requiring that all grants and loans be subject to agreements allowing the state to financially benefit from patents, royalties, and licenses resulting from the research activities funded under the measure.

Right to Conduct Stem Cell Research. Consistent with current statute, this measure would make conducting stem cell research a state constitutional right.

Fiscal Effects

Borrowing Costs. As noted earlier, this measure provides that no General Fund payments for the bonds would occur in the first five years after it took effect. The costs to the state after that would depend on the interest rates obtained when the bonds were sold and the length of time it took to repay the debt. If the $3 billion in bonds authorized by this measure were repaid over a 30-year period at an average interest rate of 5.25 percent, the cost to the General Fund would be approximately $6 billion to pay off both the principal ($3 billion) and interest ($3 billion). The average payment for principal and interest would be approximately $200 million per year.

ANALYSIS BY THE LEGISLATIVE ANALYST (CONT.)

Institute Operating Costs. As noted earlier, this measure would limit the amount of bond funding available that the institute could use for its administrative activities. The measure does not specify what would happen if the institute's administrative costs were greater than the amount of available bond funding. The amount of additional General Fund support that would be required, if any, is unknown, but would be unlikely to exceed a few million dollars annually.

Loan Repayment Revenues. If the institute awards loans in addition to grants for stem cell research and facilities, the institute would eventually receive revenues from the repayment of those loans. The measure specifies that any such loan repayment revenues would be used either to provide additional grants and loans or to pay ongoing costs for the administration of the bonds.

State Revenues From Research. As noted earlier, this measure would allow the state to receive payments from patents, royalties, and licenses resulting from the research funded by the institute. The amount of revenues the state would receive from those types of arrangements is unknown but could be significant. The amount of revenue from this source would depend on the nature of the research funded by the institute and the exact terms of any agreements for sharing of revenues resulting from that research.

Effects on University System. To the extent that the UC system receives a share of the grants awarded by the institute, it could attract additional federal or private research funding for this same purpose. The UC system could also eventually receive significant revenues from patents, royalties, and licenses.

Other Potential Fiscal Effects. If the measure were to result in economic and other benefits that would not otherwise have occurred, it could produce unknown indirect state and local revenue gains and cost savings. Such effects could result, for example, if the added research activity and associated investments due to the measure generate net gains in jobs and taxable income, or if funded projects reduce the costs of health care to government employees and recipients of state services. The likelihood and magnitude of these and other potential indirect fiscal effects are unknown.

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STEM CELL RESEARCH. FUNDING. BONDS. INITIATIVE CONSTITUTIONAL AMENDMENT AND STATUTE.

ARGUMENT in Favor of Proposition 71

PROPOSITION 71 IS ABOUT CURING DISEASES AND SAVING LIVES.

Stem cells are unique cells that generate healthy new cells, tissues, and organs. Medical researchers believe stem cell research could lead to treatments and cures for many diseases and injuries, including:

Cancer, heart disease, diabetes, Alzheimer's, Parkinson's, HIV/AIDS, multiple sclerosis, lung diseases, and spinal injuries.

In fact, medical problems that could benefit from stem cell research affect 128 million Americans—including a child or adult in nearly half of all California families.

71 CLOSES THE RESEARCH GAP.

Unfortunately, political squabbling has severely limited funding for the most promising areas of stem cell research.

Meanwhile, millions of people are suffering and dying.

Prop. 71, the California Stem Cell Research and Cures Initiative, is an affordable solution that closes the research gap, so new treatments and cures can be found.

That's why a YES vote on 71 is endorsed by a broad coalition that includes OVER 20 NOBEL PRIZE WINNING SCIENTISTS, doctors, nurses, Democrats, Republicans, and dozens of organizations, including:

• Alzheimer's Association, California Council • American Nurses Association of California • California Medical Association (representing 35,000 doctors) • Cancer Research and Prevention Foundation • Christopher Reeve Paralysis Foundation • Cystic Fibrosis Research, Inc. • Elizabeth Glaser Pediatric AIDS Foundation • Juvenile Diabetes Research Foundation • Michael J. Fox Foundation for Parkinson's Research • Prostate Cancer Foundation • Sickle Cell Disease Foundation of California.

71 PROTECTS CALIFORNIA'S TAXPAYERS AND BUDGET.

Prop. 71 doesn't create or increase any taxes.

It authorizes tax-free state bonds that will provide a maximum of $350 million per year over ten years to support stem cell research at California universities, medical schools, hospitals, and research facilities.

- These bonds are self-financing during the first five years, so there's no cost to the State's General Fund during this period of economic recovery.
- By making California a leader in stem cell research and giving our State an opportunity to share in royalties from the research, 71 will generate thousands of new jobs and millions in new state revenues.

That's why California's Chief Financial Officers, State Controller Steve Westly and State Treasurer Phil Angelides, endorse Prop. 71.

STRICT FINANCIAL AND ETHICAL CONTROLS.

Research grants will be allocated by an Independent Citizen's Oversight Committee, guided by medical experts, representatives of disease groups, and financial experts—and subject to independent audits, public hearings, and annual public reports.

Prop. 71 also prohibits any funding for cloning to create babies, reinforcing existing state law banning human reproductive cloning. It's totally focused on finding medical cures.

71 COULD REDUCE HEALTH CARE COSTS BY BILLIONS.

California has the nation's highest total health care spending costs—over $110 billion annually. A huge share of those costs is caused by diseases that could be treated or cured with stem cell therapies.

- If Prop. 71 leads to cures that reduce our health care costs by only 1%, it will pay for itself—and it could cut health care costs by tens of billions of dollars in future decades.

For more information visit www.YESon71.com.

Vote YES on 71—IT COULD SAVE THE LIFE OF SOMEONE YOU LOVE.

ALAN D. CHERRINGTON, Ph.D., *President*
American Diabetes Association
CAROLYN ALDIGE, *President*
National Coalition for Cancer Research (NCCR)
JOAN SAMUELSON, *President*
Parkinson's Action Network

REBUTTAL to Argument in Favor of Proposition 71

Stem Cell Research? YES! Human Embryo Cloning? NO!

Here are just some of the many problems with Proposition 71:

** It specifically supports "embryo cloning" research—also called "somatic cell nuclear transfer"—which poses risks to women and unique ethical problems. To provide scientists with eggs for embryo cloning, at least initially, thousands of women may be subjected to the substantial risks of high dose hormones and egg extraction procedures *just* for the purposes of research. In addition, the perfection of embryo cloning technology—even if initially for medical therapies only—will increase the likelihood that human clones will be produced.

** Why privilege this research over other important research and medical needs, especially given the limits on how much California can invest? Why not issue bonds for programs that ALREADY have proven their cost effectiveness? Embryo stem cell research in nonhuman animals has produced only limited results. More compelling evidence of its efficacy should be required before a large commitment of public resources to study it in humans.

** Proponents are manipulating those seeking cures, building false hopes with exaggerated claims, and creating a costly program without adequate oversight or accountability.

Stem cell research *should* be supported, but not this way. And don't be fooled by those who say that the opponents of Proposition 71 are all opposed to abortion and embryo stem cell research. Many of us are pro-choice, do not oppose all embryo stem cell research, and still oppose this initiative.

Vote "No" on Proposition 71.

JUDY NORSIGIAN, *Executive Director*
Our Bodies Ourselves
FRANCINE COEYTAUX, *Founder*
Pacific Institute for Women's Health
TINA STEVENS, Ph.D., *Author*
Bioethics in America: Origins and Cultural Politics

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ARGUMENT Against Proposition 71

WE SUPPORT STEM CELL RESEARCH, NOT CORPORATE WELFARE

It's wrong to launch a costly new state bureaucracy when vital programs for health, education, and police and fire services are being cut. We cannot afford to pile another $3 billion in bonded debt on top of a state budget teetering on the edge of financial ruin.

General Fund bond debt will grow from $33 Billion on May 1, 2004, to a Legislative Accounting Office projection of $50.75 Billion in debt by June 30, 2005—*a staggering 54% increase* in just 14 months!

WHO BENEFITS?

Backers will cynically use images of suffering children and people with disabilities in their commercials, but pharmaceutical company executives and venture capitalists contributed $2.6 million to put this measure on the ballot. By getting taxpayers to fund their corporate research, they stand to make billions with little risk.

NO ACCOUNTABILITY

And who will oversee how this money is spent? According to the fine print, the proponents give themselves power to exempt their "Institute for Regenerative Medicine" from aspects of our California "open meeting" law (specifically passed to *stop* this kind of backroom deal-making).

Why do proponents want to keep what they are doing a secret? If we're being asked to pay for this research, then it should be freely available to all, not just to those who will be "awarded" special contracts by the "Institute." The initiative also grants the "Institute" power to rewrite California's medical informed consent safeguards.

Most importantly, the fine print specifically prohibits the Governor and Legislature from exercising oversight and control over how this money is spent—or misspent. Even if the state teeters on the brink of financial ruin, our elected representatives will *still* have to borrow and spend this money, because the proponents are putting this money grab into our Constitution.

BAD MEDICINE

Opponents of this boondoggle include liberals, conservatives, Republicans, Democrats, Independents, medical professionals, and stem cell researchers. We all strongly *support* Stem Cell Research, but *oppose* this blatant taxpayer rip-off that lines the pockets of a few large corporations.

If there was any doubt about the true motives of the corporate promoters of this bond debt, one need only look at what it *doesn't* fund. The fine print does not initially fund adult and cord blood stem cell research. Adult and cord blood stem cell research has already produced more than 74 major medical breakthroughs, but this measure excludes support for these proven areas of research, without a two-thirds vote of the Institute's "working group."

Consider just one example: Cord blood stem cells are being used to treat sickle cell anemia with a staggering success rate of 90%. That's real progress, helping real people, but it may not receive *one penny* from this initiative.

Join with millions of your fellow citizens in demanding an end to "corporate welfare" and bonded debt. This is no time to spend billions we don't have on a self-serving sham.

Vote "NO" on Proposition 71. It's *not* what they say it is.

www.NoOn71.com

TOM McCLINTOCK, *California State Senator*
JOHN M.W. MOORLACH, *C.P.A.*
Orange County Treasurer
H. REX GREENE, M.D., *Cancer Center Director and Bioethics Consultant*

REBUTTAL to Argument Against Proposition 71

NOBEL PRIZE WINNING MEDICAL RESEARCHERS, DOCTORS, AND PATIENT GROUPS HAVE STUDIED THIS MEASURE AND URGE: YES on 71.

- Stem cell research is the most promising area of research aimed at finding breakthrough cures for currently incurable diseases and injuries affecting millions of people.
- 71 is a well-designed program to find those cures.
- It's vitally needed because stem cell research is being restricted by politics in Washington.

The claims by opponents are misleading political scare tactics.

71 SUPPORTS ALL TYPES OF STEM CELL RESEARCH—including adult and cord blood stem cell research.

71 FOCUSES ON RESEARCH BY NONPROFIT INSTITUTIONS—NOT CORPORATIONS.

- It's specifically designed to support the type of breakthrough research conducted by universities, medical schools, hospitals, and other nonprofit institutions.

71 REQUIRES PUBLIC ACCOUNTABILITY.

- 71 specifically says the institute overseeing the research MUST COMPLY WITH OPEN MEETING LAWS.
- It requires PUBLIC HEARINGS and INDEPENDENT AUDITS reviewed by the California State Controller and an independent oversight committee.

71 PROTECTS CALIFORNIA'S BUDGET.

Prop. 71 is a good investment. Studies led by a Stanford University economist project that 71 will generate millions in new state revenues from royalties and new jobs, and that new medical treatments and cures can REDUCE CALIFORNIANS' HEALTH CARE COSTS BY BILLIONS.

71 is endorsed by over 20 Nobel Prize Winning scientists, medical groups representing over 35,000 California doctors and nonprofit disease groups representing millions of suffering patients.

VOTE YES on 71—TO FIND CURES THAT WILL SAVE LIVES.

LEON THAL, M.D., *Director*
Alzheimer's Disease Research Center, University of California at San Diego
PAUL BERG, Ph.D., *Nobel Laureate Professor of Cancer Research, Stanford University*
ROGER GUILLEMIN, M.D., Ph.D., *Nobel Laureate Distinguished Professor, Salk Institute for Biological Studies*