

December 12, 2003

Hon. Bill Lockyer
Attorney General
1300 I Street, 17th Floor
Sacramento, California 95814

Attention: Ms. Tricia Knight
Initiative Coordinator

Dear Attorney General Lockyer:

Pursuant to Elections Code Section 9005, we have reviewed the proposed initiative cited as the "California Stem Cell Research and Cures Act" (File No. SA2003RF0055, Amdt. #1-NS). This measure amends the California Constitution and statutes to create a new state research institute and to authorize the issuance of \$3 billion in state general obligation bonds to provide funding for stem cell research and research facilities in California.

Background

A stem cell is a special type of cell, found in both an unborn human embryo as well as a person, that has the potential to develop into many different types of cells in the human body. Scientists have utilized stem cell research to better understand how organisms develop and how healthy cells replace damaged cells in animals and humans. This research has led to medical advances in the treatment of a variety of cancers and blood disorders. Some scientists believe that stem cells may, at some point in the future, also become the basis for treating other diseases.

California statutes currently permit research involving stem cells obtained from human embryos as well as from persons who have been born, often referred to as adult stem cells. State law currently prohibits human reproductive cloning, a process involving the use of a human embryo to reproduce a human being.

In 2003-04, the University of California (UC) budget includes about \$370 million from UC and State General Funds for various types of research. An unknown portion of this funding is allocated for stem cell research. In the 2002 federal fiscal year, the federal government dedicated over \$180 million in funding for stem cell research conducted nationwide.

Proposal

The measure would authorize the issuance of \$3 billion in state general obligation bonds to provide funding for stem cell research and research facilities in California. A new state institute would be established to use the proceeds from the sale of the state bonds to issue grants and loans for stem cell research and research facilities, and to provide oversight of stem cell research activities funded by this measure within California. The major provisions of the measure are outlined below.

New State Agencies 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 and oversight of stem cell research and development of facilities for this purpose. 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, and President pro Tempore of the Senate would make the appointments to the ICOC.

The ICOC would appoint members to three working groups focused on the following areas: (1) the awarding of grants or loans for research projects; (2) establishing scientific, medical, and ethical standards for conducting stem cell research; and (3) the awarding of grants or loans for the development of research facilities. The ICOC would consider the working groups' recommendations in making its decisions on applications for grant and loan awards and in establishing regulatory standards for research activities.

The measure would also establish a six-member California Stem Cell Research and Cures Act Finance Committee to authorize the issuance and sale of the general obligation bonds. This panel would be comprised of the Treasurer, the Controller, the Director of Finance, the chairperson of the institute, and two representatives of the ICOC.

General Obligation Bond Funding. The measure would authorize the issuance of a total of \$3 billion in general obligation bonds, and limit the issuance of these bonds to no more than \$350 million per year. The measure states its intent, but does not require in statute, that the bonds be issued during a ten-year period. The measure would require that the bond sale be structured so that no debt service (principal and interest)

would be made from the state General Fund for about the first five calendar years after the enactment of the measure unless a more cost-effective financing plan were identified. The interest accrued during that five-year period would be repaid using bond proceeds, while the principal and subsequent interest repayments would be postponed and repaid by the General Fund in future years. The proceeds of bond sales would be placed in a new California Stem Cell Research and Cures Fund that would be established by this measure and used primarily to fund the various activities of the institute.

Upon the enactment of this measure, the institute would be appropriated a \$3 million start-up loan from the state General Fund for initial administrative and implementation costs. This loan is to be repaid to the General Fund from 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 would be deducted before bond proceeds were allocated for other purposes.

Up to 3 percent of the remaining bond proceeds could be spent for the general administrative costs of the new institute, and up to an additional 3 percent would be available to the institute to pay for direct grant-making activities. The remaining funds could be used only for 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 deemed unlikely to receive federal funding. In some cases, funding could also be provided for other types of research that were determined to offer a "vital research opportunity." The institute would be barred from providing funding for research into human reproductive cloning.

Up to 10 percent of the total available for grants and loans could be used to build 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 statutory provisions, this measure would establish within the State Constitution the legal right to conduct stem cell research using adult and embryonic stem cells.

Fiscal Effects

Borrowing Costs. This measure provides that no General Fund payments for the bonds would occur in the first five years after it takes effect. The interest expenses for any bonds issued during that period would be paid out of the bond proceeds. After the initial five-year period, the costs to the state would depend on the interest rates obtained when the bonds were sold and the time period over which this debt would be repaid. 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 (near current rates on long-term general obligation debt), 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.

Institute Operating Costs. As noted earlier, this measure limits the amount of funding available from the proceeds of the bonds for general administration costs of the institute as well as for its grant-making activities. If the costs incurred by the institute for these purposes exceeded the amount available from bond proceeds, it is unclear what would happen. The amount of additional General Fund resources involved, if any, is unknown, but is unlikely to exceed a few million dollars annually.

Loan Repayment Revenues. To the extent, if any, that 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 deposited in the California Stem Cell Research and Cures Fund and 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 such 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. The UC system would probably receive a share of the grants awarded by the institute under this measure. To the extent that this occurred, UC 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, as discussed above.

Potential Indirect Fiscal Effects. To the extent that the measure results 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, to the extent that added research activity and associated investments due to the measure generate net gains in jobs and taxable income, or projects funded 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.

Summary

This measure would have the following direct fiscal effect:

- 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 of about \$200 million per year.

Sincerely,

Elizabeth G. Hill
Legislative Analyst

Donna Arduin
Director of Finance