

Economic Impact Study – Request to Governance Sub-Committee for contract approval

Background – Section 3 of Proposition 71 (Purpose and Intent) states, “It is the intent of the people of California in enacting this measure to:” ... “Benefit the California Economy by creating projects, jobs, and therapies that will generate millions of dollars in new tax revenues in our state.” In keeping with that pledge the Scientific Strategic Plan for CIRM, released in 2006 (page 94), called for the development of metrics to assess the economic impact of the Institute’s activities. At that time it was anticipated that this would require the issuance of an RFP in 2008 for a contract of about \$300,000 to identify the appropriate metrics and develop tools to calculate impact. Larger, more complete studies (up to \$1M each) were slated for 2012 and 2017. Consequently, President Trounson began the first stage of this process in September 2008 with the help of legal consultant, Nancy Koch, who developed an RFP that was released in September 2008.

Process – In developing the RFP, Ms Koch and Cynthia Shaffer, CIRM’s Contract Administer, spoke to several individuals expert in this type of analysis for assistance and advice in creating the scope of work. Ultimately, five firms responded to the RFP with bids between \$250,000-300,000. Ms Koch, Ms Shaffer and John Robson, Vice President for Operations, scored each proposal against the criteria in the RFP and the two that ranked highest were interviewed by telephone in January 2009. LECG was selected as the leading candidate and a second phone interview was conducted in early February with Henry Miller of LECG by ICOC Chair Robert Klein, Ms Koch, Ms Shaffer and Dr Robson. At that point a decision was made to proceed with LECG.

Because of the economic situation in California at that time and conservative cash flow planning by CIRM (arising from the uncertainty on the timing of bond sales), negotiations to finalize the contract were suspended temporarily. That process was re-started in the summer. In mid-September Dr Miller and his colleague, Greg Russo, from LECG visited CIRM to meet with several members of the staff, including President Trounson, along with Chairman Klein and ICOC Vice-Chairs Duane Roth and Art Torres. The purpose of that meeting was to finalize the scope of work for the project.

Goals – Proposition 71 is explicit in stating that the investments through CIRM in stem cell research will produce significant economic benefits to California in terms of job creation, advances in the biotechnology industry, savings in patient care costs and increases in patient productivity. The goal of the project to be conducted by LECG is to develop metrics and a model for calculating these benefits.

The plan agreed upon between CIRM and LECG is to initially build a model around a test case, a specific disease – Polycythemia Vera – that is the target of a clinical trial under the direction of Dr Catriona Jamieson at UCSD (the topic of a disease “spotlight” at the June 2009 ICOC meeting in San Diego). This clinical trial involves a small molecule drug therapeutic identified through studies using stem cells. The model will

take into account direct benefits of CIRM funding (job creation through research and facilities awards), secondary cascades of CIRM funding (“multiplier effect” – e.g. payments to suppliers and subcontractors along with affiliated job creation and state revenues from income, sales and property taxes), potential savings in health care costs (compared to current therapies) and increased productivity for both patients and their caretakers (related to improved vitality and quality of life). Once this model is created, it will be evaluated and fine-tuned by a panel of experts selected by LECG and CIRM. The application to Polycythemia Vera will then be completed and a report prepared by December 2009.

Subsequently, the model will be expanded and adapted for analyzing other diseases and other applications of stem cells for treating these diseases. In addition to the development of small molecules, other approaches will include cellular therapies (replacing cells, organs &/or organ functions) and the creation of normal and disease-specific cell lines for screening (e.g. predictive toxicology) and early diagnostics. The entire project should be completed by the beginning of May 2010. Further, we expect the results to identify data that CIRM should collect on an on-going basis as part of its grants management process for use in future economic analyses.

Milestones – The contract lists four milestones, each with a target date and a maximum cost of \$75,000 (maximum total - \$300,000). CIRM has the right to cancel the contract at any time with 30 days notice. The milestones and target dates are:

1. Submission of the measurement model for the Polycythemia Vera test case – October 31, 2009;
2. Completion and submission of the Polycythemia Vera test case – November 30, 2009;
3. Submission of the generalized economic impact model with supporting documentation – February 28, 2010;
4. Submission of the final report – April 30, 2010

When this project is complete, CIRM will have a fully developed case study showing the broad-reaching economic impact resulting from research investments that have led to a new treatment for Polycythemia Vera. CIRM will also have a more generalized model for conducting similar studies in the future dealing with different diseases and different stem cell applications for attacking those diseases. CIRM will also have received guidance for the types of information that should be gathered from this point forward in order to complete those future analyses and assessments.

The senior staff at CIRM is excited about this project and eager to see it move forward with approval from the Governance Sub-Committee.