



## **Obama's Policies Will Up the Value of California's Investment in Stem Cells**

January 20, 2009—Within a few days, or maybe even hours, of taking the oath of office this morning, President Barack Obama is expected to lift the restrictions on stem cell research put in place August 9, 2001 by then President George W. Bush.

While lifting the restrictions on federal funding for all existing stem cell lines will likely result in only modest increases in stem cell funding in the current economic climate, its impact will be dramatic nonetheless. Instead of having just 21 cell lines available to them, federally-funded researchers around the country will now have hundreds of lines to choose from, and researchers who have been using those newer cell lines with CIRM or other non-federal funds will no longer work under the costly and complex bureaucracy needed to maintain the duplication and separation of equipment and facilities required under the old restrictions.

Stem cell lines mimic snowflakes more than pennies in that no two lines are exactly alike. Some are easier to grow in the lab. Some become brain cells easier and some become heart cells easier. Some newer lines have eliminated the animal-based feeder cells that often contaminated the older lines. Most important, the newer cell lines eliminate an enormous social injustice inherent in the original 21 lines—the new cell lines come closer to representing the genetic diversity of our multi-racial nation. As cell lines are increasingly used as a research tool to understand the underpinning of disease, this diversity is essential.

Lifting the funding and equipment-use restrictions will rapidly yield new collaborations between California's robust CIRM-funded stem cell research community and colleagues around the country. These collaborations will leverage both California's financial and intellectual capital and should bring life-saving and health-care-cost-saving therapies to our citizens more quickly.

“Californian researchers being able to apply for a mix of federal and state funding will add breadth and depth to what they can accomplish,” said CIRM president Alan



Trounson. “In the two and a half years we have been funding research we have built the intellectual infrastructure to have a significant impact on the capacity to effectively utilize any newly available federal funding targeted to stem cell science and associated biotechnology.”

CIRM will continue to fund facilities and types of research that the federal government has not funded or tended to underfund.

“The National Institutes of Health does not typically fund the early-phase human trials that are so important to driving therapy forward,” said CIRM Governing Board Chairman, Robert Klein. “Our new loan program for biotech companies, for instance, is meant to provide a revolving source of support for institutions testing the safety and efficacy of possible therapies.”

The 12 major facilities that CIRM funded in May 2008 will continue to be a critically needed new asset for California’s research infrastructure. Most of California’s research universities are short of laboratory space and generally have very little existing space that works well for the cell culture research. NIH provides very limited funding for facilities.

Six of the 12 CIRM facilities are active construction projects at this time. Because CIRM’s funds helped leverage private donations those projects have not been impacted by the freeze in state loan funds to construction projects, and since CIRM’s bonds were structured so that there is no repayment from the state before January of 2010, these project have no negative impact on the state’s general fund budget shortfall. Instead, these projects have a very real economic stimulus impact for the state.

With the science and facilities already funded by CIRM Californian researchers have made great progress toward genuine cures. With the stroke of a pen, President Obama will give researcher throughout the U.S. the capacity to profoundly accelerate that medical revolution.