

## Obama to restore stem cell funding

Bernadette Tansey, Chronicle Staff Writer

Saturday, March 7, 2009



President Obama plans to rescind limits on federal funding for research on human embryonic stem cells by signing an executive order Monday, fulfilling a campaign promise to frustrated supporters of the scientific work.

The action has been eagerly anticipated by the thriving community of California stem cell research, centered in the Bay Area, which hopes to generate both a prosperous new industry and an arsenal of weapons against debilitating diseases.

White House aides confirmed Friday that Obama will announce a stem cell policy shift in an East Room ceremony. He is expected to lift restrictions imposed by President George W. Bush in August 2001.

Scientists in the Bay Area, one of the world's top centers of stem cell research and arguably the strongest in the nation, said they expect that Obama will allow the National Institutes of Health to support research on hundreds of embryonic stem cell lines that did not qualify for federal funding under the Bush policy.

Bush had agreed with religious and conservative groups opposed on moral grounds to the extraction of stem cells from human embryos. He limited NIH support to work on 21 embryonic stem cell lines that already had been created by 2001.

But researchers protested that those cells were unsuitable for use as therapies and were inadequate for the exploration of the full scientific potential of stem cell studies.

Dr. Deepak Srivastava, director of the Gladstone Institute of Cardiovascular Disease in San Francisco's new biotechnology complex at Mission Bay, said Obama probably has timed his announcement to allow stem cell researchers to qualify for some of the billions of dollars to be provided to NIH under the nation's stimulus package to jump-start the ailing economy.

Srivastava said California is well placed to capture a significant share of that federal money because the state's \$3 billion taxpayer-supported stem cell agency, the California Institute for Regenerative

FREEDOM REALTY EXCHANGE®  
**BUILDER CLOSEOUT AUCTION**  
Minimum Bids Start at  
**\$179,000**  
Hurry! Bid Deadline  
**April 2<sup>nd</sup>**  
CITYCROSSING

Medicine, has already paid to train scientists, support research and build new laboratories. The institute was created by a voter initiative in 2004.

"We're really ahead of the curve and in the best position to make the discoveries now that the federal government is going to be a player," Srivastava said.

At least \$200 million dedicated to stem cell research is part of a fast-tracked federal stimulus grant fund that could deliver money to labs as early as summer's end, said Dr. Arnold Kriegstein, director of the Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research at UC San Francisco.

"I don't think they appreciate how much the floodgates will open," said Kriegstein, who expects that the money could fund about 200 projects. "I wouldn't be surprised if we had that many applications from UCSF alone."

While the Bush policy significantly hampered stem cell research, it did not forbid private funding of the work. Research teams throughout the country found alternate sources of support, and several states followed California's lead and created grant programs.

Scientists and disease advocacy groups had chafed at the Bush restrictions because they saw in stem cell research the possibility of cures or more effective treatments for a broad range of diseases. Embryonic stem cells retain the ability to transform into any of the specialized cell types that make up the body, such as nerve, muscle or skin cells. The hope is that such cells could provide replacement tissues for many illnesses, including spinal cord injuries and diabetes.

But the scientific strategy raised ethical and moral objections that are not confined to concerns over the destruction of human embryos.

The early stage embryos are usually obtained from fertility clinics where clients have a surplus of embryos after completing their families. Some embryos are also created specifically for research by swapping a new nucleus into an egg cell from a woman who must go through hormone treatments to induce egg production.

Such procedures raise thorny issues related to the risks of treatment, informed consent and the respectful handling of human material.

Kriegstein said the NIH took no leadership role in the formulation of ethical guidelines for much of stem cell work because it was not funding it. Universities and other institutions have set up their own criteria, but Kriegstein said he hopes the NIH will help set national standards.

While Obama is free to allow NIH grant awards to study embryonic stem cell lines created since 2001, other federal restrictions remain. The agency will probably not be permitted to fund the

actual derivation of new embryonic stem cells, under a federal law limiting embryo research called the Dickey-Wicker Amendment, Kriegstein said.

The state's stem cell agency, however, can fund the creation of new embryonic stem cells, and these could presumably be studied with federal support if Obama acts as anticipated Monday.

The California Institute for Regenerative Medicine was set up by the voter initiative Proposition 71 to fund research that the federal government could not support under the Bush restrictions. Robert Klein, a real estate developer who spearheaded the initiative, said the NIH is now eager to work with the institute.

"There was this oppressive ideological blockade of the development of medical science," said Klein, who now chairs the state stem cell institute's governing body. "We've been finally freed from the Middle Ages."

Dr. Irving Weissman, director of Stanford's Stem Cell Biology and Regenerative Medicine Institute, said Obama's policy will relieve researchers from the onerous requirement to segregate projects funded by the NIH from work on embryonic stem cells.

Weissman said he will attend Obama's signing ceremony in Washington on Monday.

"I never thought I would actually fly cross-country just for something like this," said Weissman, "but then I changed my mind. I've been working and speaking out about the ban for about eight years, and now I want to be there."

E-mail Bernadette Tansey at [btansey@sfnchronicle.com](mailto:btansey@sfnchronicle.com).

<http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/03/07/MNNB16AQFH.DTL>

This article appeared on page **A - 1** of the San Francisco Chronicle

 

[© 2009 Hearst Communications Inc.](#) | [Privacy Policy](#) | [Feedback](#) | [RSS Feeds](#) | [FAQ](#) | [Site Index](#) | [Contact](#)