

UC SANTA BARBARA

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Gail Gallessich

Stem Cell Research Grant Goes to UCSB

The University of California, Santa Barbara will receive \$1,343,859 in state funds over three years to fund stem cell research. The award was announced Friday by the Independent Citizens' Oversight Committee (ICOC) as part of the first grant awards by the California Institute for Regenerative Medicine (CIRM). UCSB is among 15 other California institutions to receive a grant from CIRM.

"This is an exciting moment for the CIRM as these awards mark the first step in our scientific program of stem cell research---an accomplishment we have been able to achieve in less than one year as a state agency," said CIRM President Zach Hall on Friday.

"The CIRM training program established today will be the most comprehensive training program to date in the field. It will provide a pipeline of highly trained basic and clinical investigators for the research that CIRM will fund in California."

The long-term goal of UCSB's stem cell research program is to understand how human embryonic stem cells can be differentiated into ocular cells that might be used to treat eye disease, especially macular degeneration. A wide variety of interdisciplinary studies of the basic biology of stem cells will be supported, including work on model organisms as well as human embryonic stem cells. The grant will fund two graduate students and four postdoctoral fellows over three years. Two new graduate courses, "Stem Cell Biology in Health and Disease" and "The

Ethics of Human Embryo Research," will be developed as part of the training. Some of the work will be carried out in the newly established Laboratory for Stem Cell Biology. Scientists are currently growing government-approved human stem cells in this lab. Participating researchers will come from UCSB's Department of Molecular, Cellular and Developmental Biology, the College of Engineering, and the Neuroscience Research Institute.

This award reflects the unique strengths of UCSB in interdisciplinary research in molecular biology, neurobiology (especially vision science), and bioengineering, explained Dennis Clegg, chair of the Department of Molecular, Cellular and Developmental Biology. "It will provide funding to train the next generation of scientists in this important area of research, in part fulfilling the mandate of the California voters who approved Prop 71 last fall," said Clegg.

Martin Moskovits, UCSB's dean of the Division of Mathematical, Life and Physical Sciences, called the grant "a strong statement that we are significant international players in the

kind of biomedical research from which important new therapies for human disease will be developed." He explained further that, "We have already established important partnerships with companies and medical schools with whom we intend to pursue a vigorous research program."

Designed to take advantage of the different strengths of California research institutions, the CIRM training program will educate fellows from a variety of scientific backgrounds, ranging from computation and molecular biology to nanotechnology to clinical medicine. All programs are required to offer at least one course in stem cell biology and disease as well as a course in the social, legal and ethical implications of stem cell research. Institutions were explicitly encouraged to promote interaction among trainees from different fields, especially those trained in basic science and clinical medicine. Because of the diversity of the California population, the CIRM also placed a premium on training a diverse pool of investigators.

The new program will be funded through bond anticipation notes (BANs), a form of bridge financing, which is designed to be purchased by philanthropic individuals and institutions. It is the goal of the ICOC's financing team to proceed with the first BANs issuance in October 2005 for this program. The CIRM is currently prevented from

issuing bonds by litigation brought by opponents of the California Stem Cell Research and Cures Initiative.

Governed by the ICOC, CIRM was established in 2004 with the passage of Proposition 71, the California Stem Cell Research and Cures Initiative. The statewide ballot measure, which provided \$3 billion in funding for stem cell research at California universities and research institutions, was approved by California voters, and called for the establishment of an entity to make grants and provide loans for stem cell research, research facilities, and other vital research opportunities. For more information, please visit www.cirm.ca.gov.

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[California Institute for Regenerative Medicine](#)

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