

CIRM Awards \$5 Million Early Translational Grant to UC San Diego Researcher

April 30, 2009

Debra Kain

A stem cell researcher from the University of California, San Diego, Yang Xu, professor of biology, has been awarded a \$5.16 million grant from the California Institute for Regenerative Medicine (CIRM). Fifteen Early Translational grants, totaling \$67.7 million, were approved at the April 29 meeting of the Independent Citizens' Oversight Committee to fund work that translates basic research into clinical cures.

"This Early Translational grant will enable Dr. Xu and researchers at UC San Diego to develop improved models of human disease," said Larry Goldstein, PhD, director of UC San Diego's Stem Cell Program. "Our hope is that these models will provide scientists and biotech companies with more reliable ways to test drugs for safety and efficacy."

Xu's research uses induced pluripotent stem cells (iPSCs), which are very similar to human embryonic stem cells (hESCs). Generated from a patient's somatic cells, pre-existing cells that no longer differentiate, iPSCs could provide an ideal cell source for transplantation by avoiding graft rejection in the patient. Xu and colleagues propose to eliminate the cancer risk associated with pluripotent stem cells and develop mouse models with a functional human immune system in order to study immune responses and tolerance during cell transplantation.

"This new translational grant will allow us to establish extensive collaboration with other physician scientists to solve the issues of cancer risk and immune rejection associated with pluripotent stem cell-based therapy," said Xu.

The latest round of CIRM funding brings the total grants to the UC San Diego Stem Cell Program to close to \$45 million since grants were first awarded in late 2005.

Media Contact: Debra Kain, 619-543-6163 or ddkain@ucsd.edu