CIRM Bridges to Stem Cell Research and Therapy Training Grant

Grant Award Details

CIRM Bridges to Stem Cell Research and Therapy Training Grant

Grant Type: Bridges

Grant Number: EDUC2-08375

Project Objective: This program provides stem cell training for up to 10 students per year (undergraduate or other level) at California State University, San Marcos. Training includes coursework, patient engagement opportunities, outreach activities, and a 12 month internship. Students are recruited from CSUSM as well as local community colleges.

Investigator:

Name:	Bianca Mothe
Institution:	Cal State Univ, San Marcos
Type:	PI

Award Value: $3,041,366

Status: Active

Grant Application Details

Application Title: CIRM Bridges to Stem Cell Research and Therapy Training Grant

Public Abstract:

Stem cell biology has developed into a rapidly expanding technology offering novel therapeutic approaches to human disease. California has taken the lead in the development and expansion of these technologies. There is a critical need to recruit, educate, and train the next generation of scientists and individuals, who will work on achieving these goals. The focus of our program will be to recruit students from California's large and diverse population, and to provide them with the educational and technical skills that will allow them to pursue careers in stem cell science. The strength of our proposal includes our ability to effectively utilize our location by recruiting students from our home institution and community college partners and train them effectively to carry out successful internships with our host institutions.

We will recruit and select a minimum of fifty students, ten students per year, from three different academic institutions. These students will then be matched with host internships labs through an interview process. Once the selection, interview, and mentor lab match is complete, students will be enter a 12-month internship experience at one of the labs mentioned above. During this time, they will be enrolled full-time at the originating institution and will attend a seminar series that merges science, patient advocacy, career exploration, and community engagement.

The greatest key to the success of our plan relies on our geographical location and the partnerships we established throughout our region. We have established long-standing partnerships with leaders in stem cell research in academia including the Salk Institute for Biological Studies, Sanford Burnham Prebys Medical Discovery Institute, UCSD, and The Scripps Research Institute. In addition, our students will have the option to intern in premiere biotechnology companies including ThermoFisher Scientific, Stemedica, Organovo, and Genea Biocells. Furthermore, we will have a seminar series that will serve to educate the interns, the general student population and community on the progress and potential of stem cell research and the important role of patient advocacy. Our collaborative commitments with our community colleges, academic and industry partners will ensure the success of our students and ultimate progress in regenerative medicine.

We believe that through our fortunate geographical location, access to diverse students and research opportunities, and development of new programs, we will help to train exceptional prospects for the future stem cell science workforce in California.

Statement of Benefit to California:

Stem cell biology has developed into a rapidly expanding technology offering novel therapeutic approaches to human disease. California has taken the lead in the development and expansion of these technologies. There is a critical need to recruit, educate, and train the next generation of scientists and individuals who will work on achieving these goals. The focus of our program will be to recruit students from California's large and diverse population and to provide them with the educational and technical skills that will allow them to pursue careers in stem cell science, including research and the development of therapies.

Our benefit to the state of California comes from increasing the stem cell science workforce available and educating the future generation about stem cells. We will train 50 new undergraduate and graduate students who will gain specific expertise in new and innovative stem cell research and therapies.

This proposal will greatly aid in the development of the future stem cell science workforce who will also have experience in regulatory affairs, community engagement and patient advocacy. These individuals will contribute to the diverse and evolving nature field of stem cell science in the State of California.