Applications may be downloaded at http://hhmi.fullerton.edu

PROGRAM DESCRIPTION
The overarching goal of the CSUF HHMI Research Scholars Program is to promote and encourage the flow of undergraduates from our diverse populations, into science careers as leading researchers and teachers, by identifying, developing and preparing those with exceptional potential, and particularly those underrepresented in STEM disciplines and/or with educational/financial disadvantages.

EXPECTED OUTCOMES

Long-term expected outcomes are to produce:
• More leading researchers in STEM with PhD, MD/PhD, other professional/PhD-linked degrees
• More leading science teachers for K-12 and community colleges (CCs)
• Increased numbers of individuals from underrepresented and disadvantaged backgrounds entering STEM careers in the workforce

This translates into short-term objectives of:
• Recruiting, interesting and/or developing increased numbers of capable students (high school and college) to become majors in STEM that go into STEM careers
• Producing more high caliber graduates who enter PhD, MD/PhD & analogous programs with the intention of engaging in research careers in STEM disciplines, becoming leaders in their fields
• Producing more high caliber graduates who become credentialed as science teachers.

PROGRAM COMPONENTS

Objectives and outcomes shall be achieved through interactions of CSUF undergraduates, CC undergraduates, high school students, and high school science teachers in an integrated 3-part program (a potential model for these objectives) composed of:
• A 2-year intensive Undergraduate Research Scholars program (URS) for CSUF undergraduates (UGs) of exceptional potential, involving in-depth faculty mentored research, developmental workshops/seminars and other preparatory activities to promote entry into doctoral programs, additionally enriched by inclusion of some MS students (1 per year) whose life experience/convictions are expected to support/ease the pathway of UGs into doctoral studies but that also exploits an extra pool of talented underrepresented minority individuals.
• Summer Research Experiences (SRE), in which beginning undergraduates from CSUF and linked community colleges spend ten weeks, and cohorts of two high school students and one high school science teacher spend five weeks doing research in individual faculty laboratories.
• Weekend Research Experiences (WREs) for beginning CC and CSUF undergraduates as well as high school students and science teachers, who carry out multifaceted experiments on a faculty research question over one weekend, then putting together and presenting the results on the following Saturday.
• Opportunities for URS/SRE scholars to give a mentored class on their research to high school students; and/or to assist in supervising short term research experiences at CSUF and CCs.

Supported by a Grant from the Howard Hughes Medical Institute to Cal State Fullerton