

CAL-BRIDGE: THE CHALLENGE

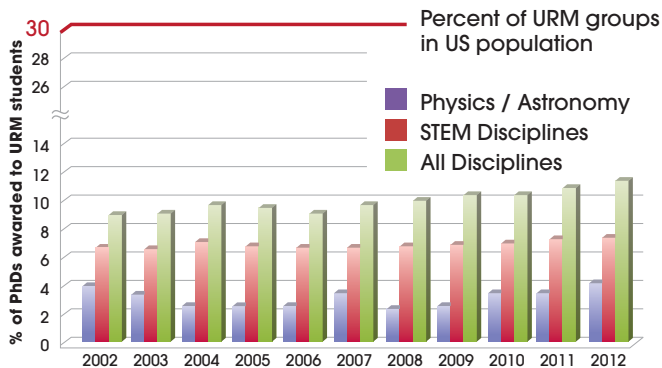
The percentage of PhDs that are awarded to underrepresented minority (URM) students is less than a third of their representation in the general population.

WHY CREATE THIS PROGRAM?

African Americans, Hispanic Americans, and Native Americans constitute 30 percent of the U.S. population, but less than 4 percent of astronomy PhDs awarded in the United States

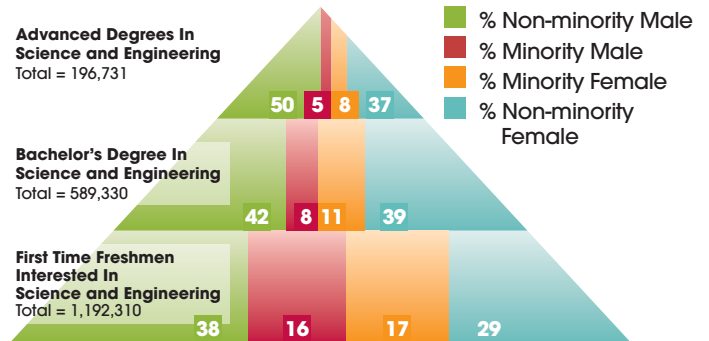
- 70% of URM STEM students are lost at pre-major to major transition (v. 40% for non-URM STEM students)
- 20% of URM STEM majors go on to Master's degree
- 2% of URM STEM majors go on to PhD

URM-EARNED PhDs

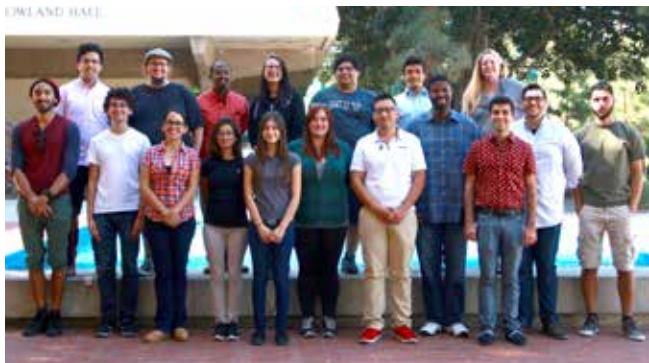


Source: National Science Foundation, National Center for Science and Engineering Statistics. 2015. *Women, Minorities, and Persons with Disabilities in Science and Engineering: 2015*. Special Report NSF 15-311. Arlington, VA. Available at <http://www.nsf.gov/statistics/wmpd/>.

MINORITIES IN ASTRONOMY, PHYSICS, COMPUTER SCIENCE AND ENGINEERING



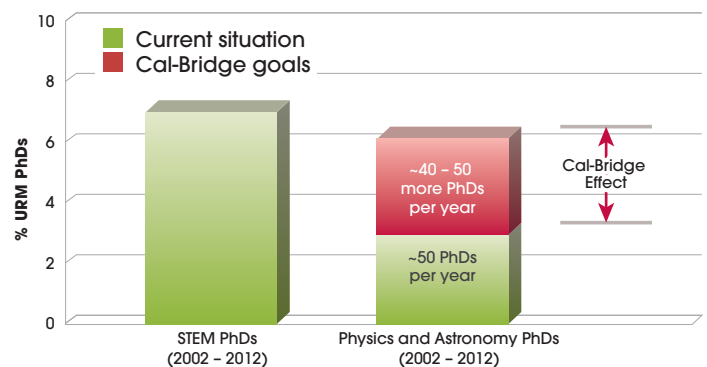
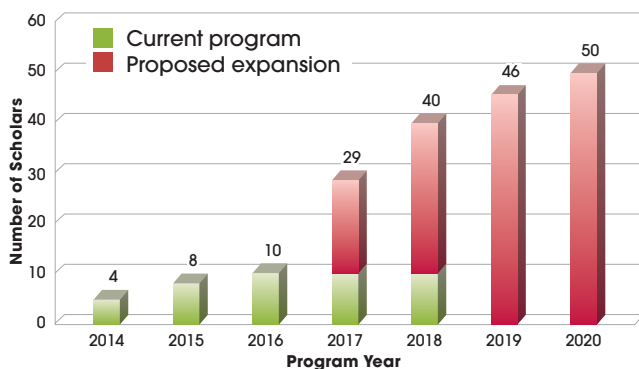
WHO HAS PARTICIPATED IN CAL-BRIDGE?



- 34 Cal-Bridge scholars in the first five years
 - 30 first-generation college students
 - 22 Hispanic students
 - 13 women, including 10 URM women
- 11 of 13 scholars accepted into one or more PhD programs across the country in the last 2 years
 - 6 scholars accepted to one or more UCs
 - 3 recipients of NSF Graduate Research Fellowships
 - The third cohort of 9 Cal-Bridge scholars is applying to graduate schools this fall

A MEASURABLE IMPACT NATIONALLY

An expanded Cal-Bridge program can cut the physics and astronomy URM PhD percentage gap with respect to the rest of STEM by half or more.



CAL-BRIDGE: THE PROGRAM

Started in 2013, Cal-Bridge is a CSU-UC PhD bridge program that fosters the pursuit of **advanced degrees in Physics and Astronomy** by members of URM groups, through active mentorship and scholarship funding.

CAL-BRIDGE PATHWAY TO ADVANCED DEGREES



THE CAL-BRIDGE NETWORK

Cal-Bridge scholars are recruited as rising juniors from 15 CSU campuses. Each is jointly mentored by one CSU and one UC faculty member, selected from a pool of over 140 physics and astronomy faculty at 15 CSU and 9 UC campuses in California. Qualified students at community colleges are recruited prior to transferring to a participating CSU campus. Funding is being sought to expand the program throughout California and in other STEM fields.

CAL-BRIDGE SOUTH



CAL-BRIDGE NORTH



● CSU CAMPUSES

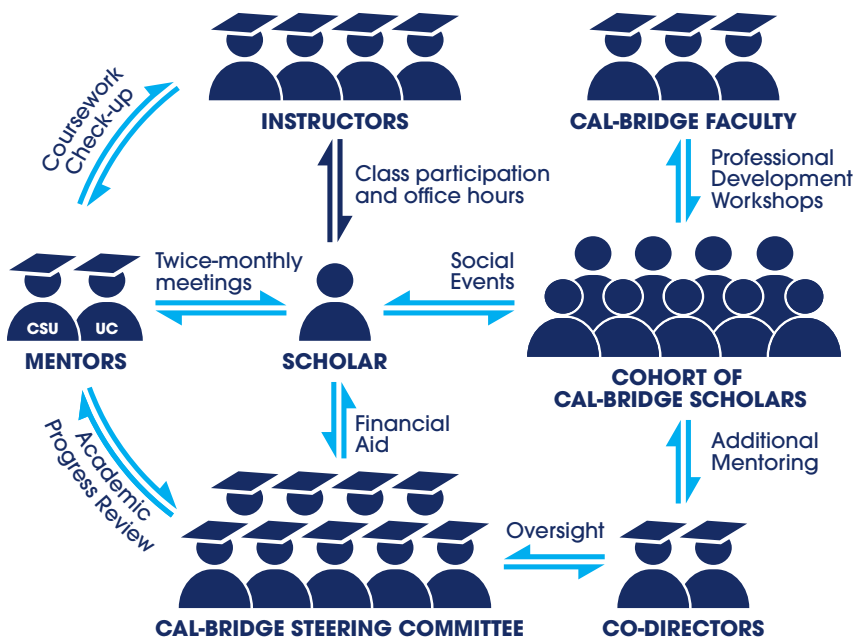
◆ UC CAMPUSES

● CSU CAMPUSES

◆ UC CAMPUSES

KEYS TO THE SUCCESS OF CAL-BRIDGE

Cal-Bridge provides an extensive network of support beyond the traditional student/instructor relationship:



Cal-Bridge scholar Cristilyn Cortez with mentors Sara Callori, CSUSB and Fred Hamann, UCR.

A PORTFOLIO OF ADVANTAGES FOR PARTICIPATING SCHOLARS

- Creation of a supportive cohort of like-minded students
- Peer mentoring
- Substantial financial aid
- Significant mentoring beyond what is typical for undergraduates
- Innovative joint UC/CSU mentoring of scholars at CSU campuses
- Professional development workshops
- Early involvement in research
- Clear pathway to acceptance into UC grad programs