

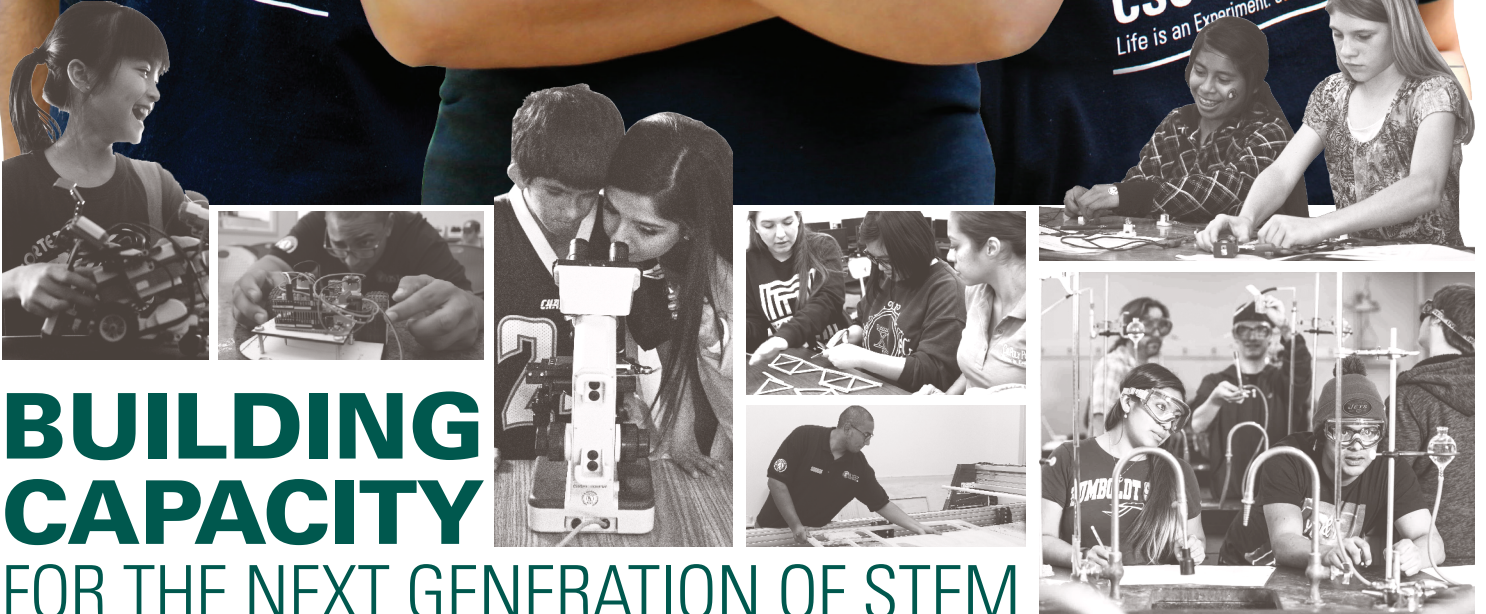


CSU

# stem

# VISTA

LIFE IS AN EXPERIMENT  
CULTIVATE THE SOLUTION



# BUILDING CAPACITY FOR THE NEXT GENERATION OF STEM CHANGE MAKERS



**OUR FUNDER**

AmeriCorps\*VISTA is a national service program of the Corporation for National and Community Service, often referred to as the domestic Peace Corps. Founded as Volunteers in Service to America in 1965, VISTA has been on the front lines in the fight against poverty in America for 50 years. VISTA members mobilize resources to grow and enhance organizations and projects that serve low-income communities.

**SUPPORT FOR IMMIGRANT STUDENTS**

As a result of three years of VISTA support and student advocacy efforts, Cal Poly San Luis Obispo established a professionally staffed Center in 2017 to support the needs of immigrant students.

**THE WAYS WE BUILD CAPACITY: WE INSPIRE**

Degree attainment in the science, technology, engineering, and mathematics (STEM) fields opens doors to an abundance of career opportunities that will keep California’s student population out of poverty. As the largest and most diverse university system in the country, the CSU is the engine of economic prosperity and upward mobility actively strengthening a more prepared STEM workforce in California.

CSU STEM VISTA, in partnership with our funder the Corporation for National and Community Service, has been increasing access to and opportunities for CSU students to have engaging, hands-on learning opportunities, which research shows help students stay in school and graduate. CSU STEM VISTA members have developed academic enrichment trainings and workshops, expanded partnerships with K-12 schools, and established internship and research opportunities that intentionally welcome women, first generation, low-income and students of color in STEM.

Today, thanks to the groundwork laid by our 48 CSU STEM VISTA members and campuses, we are beginning to close the equity gap in STEM. As you will read in this three-year impact report, the CSU STEM VISTA program has not only contributed to the implementation and enhancement of these high-quality educational practices, but has also inspired a new generation of STEM change makers.

*“A student’s chances of graduating should not be determined by their family income or their ethnicity, but by their willingness to work hard and our determination to help them achieve their goals.”*

**Timothy P. White**, Chancellor, The California State University

**CSU STEM VISTA MEMBERS HAVE...**



Provided services to nearly **35,000** students, faculty, staff and other members of the community

Provided nearly **33,000** hours of hands-on STEM activities

Reached more than **20,000** K-12 students



## THE WAYS WE BUILD CAPACITY: WE SERVE

Our VISTA members are driven to serve because of their passion for advancing education, their love for science and their commitment to ensuring students like them have the opportunity to succeed.

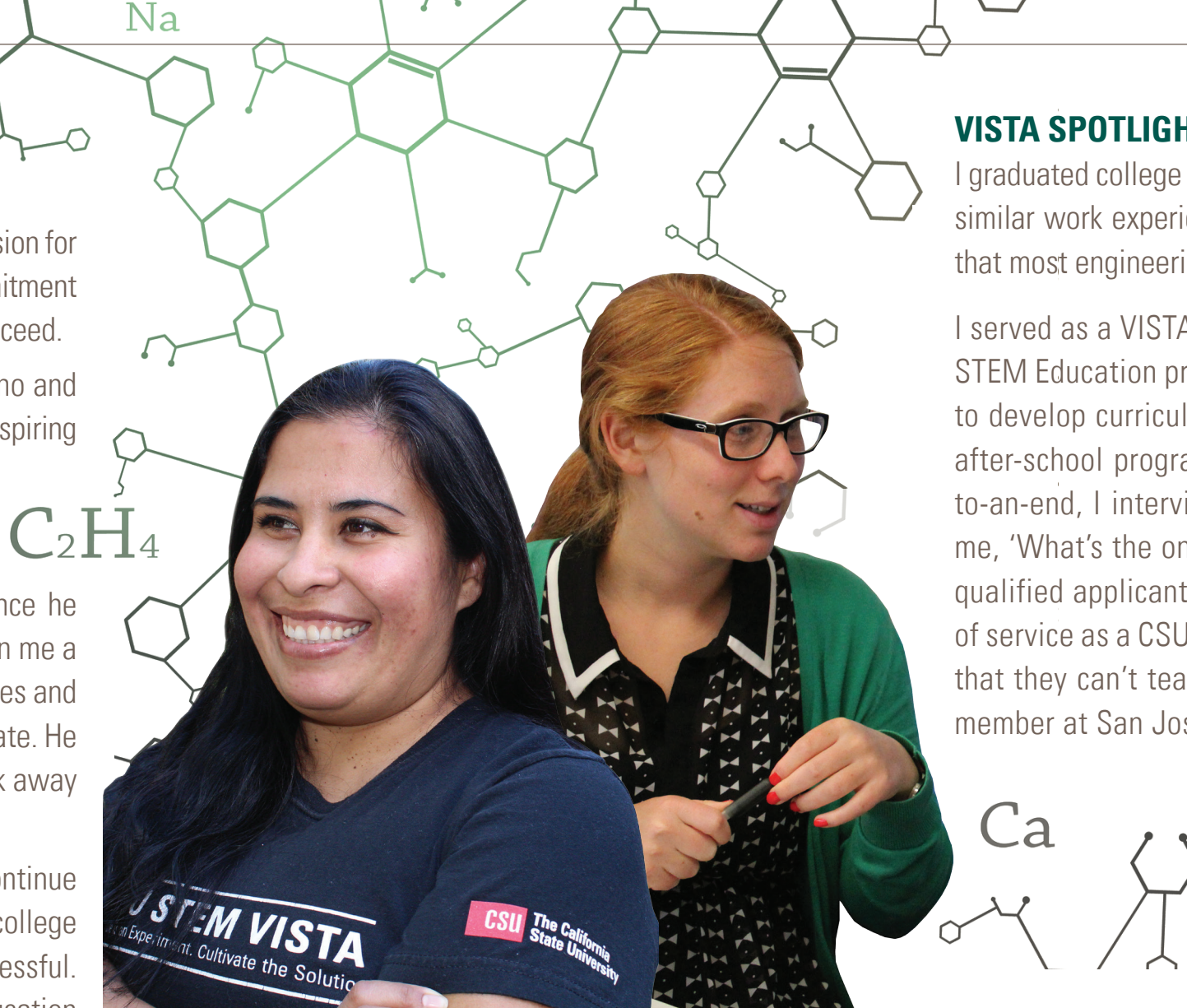
In these VISTA spotlights, VISTA alumnae Miriam Ureno Moreno and Nina Levine share how they pursued their dreams and are now inspiring future scientists and engineers.

### VISTA SPOTLIGHT: MIRIAM

I was raised by my grandfather who worked in the fields since he was very young. Even without a formal education, he instilled in me a strong desire to learn. He taught me to fight against the injustices and unfair biases that keep certain populations in poverty and illiterate. He empowered me to pursue my dreams and aspirations and break away from the “status” I was born into.

When I was 15 years old, I migrated to the United States to continue pursuing my education. It took me nearly 15 years to finish my college degree because I lacked the resources and support to be successful. Despite these many obstacles, I earned the President’s Education Award for Outstanding Academic Achievement and eventually my degree from CSU Stanislaus.

When I joined the CSU STEM VISTA program, I found myself in the perfect environment to channel my passion for social justice, education and science. This program, like a chrysalis, nurtured my leadership skills and empowered my disenfranchised self. I am extremely grateful for the opportunity to serve my community and empower underrepresented students in STEM. This program gives me hope that our CSU system is working to implement equitable programs and serve students who have been traditionally underserved and underrepresented. **Miriam Ureno Moreno**, 2016-18 VISTA member at CSU Stanislaus.



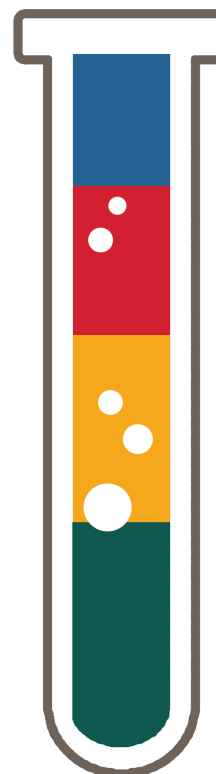
### VISTA SPOTLIGHT: NINA

I graduated college with the same degree as all my peers. Having had similar work experiences and classes, I wanted a unique experience that most engineering graduates rarely get.

I served as a VISTA with the San José State University Jay Pinson STEM Education program where I used my engineering background to develop curricula and design lesson plans for local K-12 STEM after-school programs. A few months after my VISTA year came-to-an-end, I interviewed for a job as a civil engineer. They asked me, ‘What’s the one thing that sets you apart from the rest of the qualified applicants?’ My answer was simple – empathy. My year of service as a CSU STEM VISTA opened my eyes to so many things that they can’t teach you in school. **Nina Levine**, 2014-15 VISTA member at San José State University.

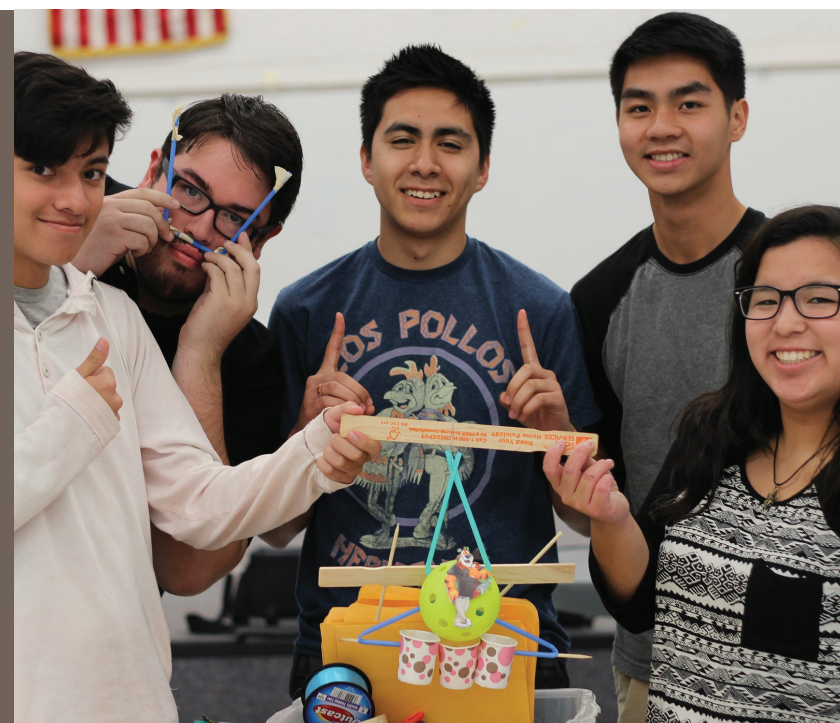
### Bringing passion, knowledge and skills to improve education and fight poverty, CSU STEM VISTA members are:

- first generation college graduates **35%**
- underrepresented minorities (URM)<sup>1</sup> **40%**
- graduates of the CSU system **50%**
- STEM majors **60%**



### EXPANDING OPPORTUNITIES

During her year of service, Miriam organized and expanded several K-12 outreach programs that offered engaging hands-on learning activities for nearly 1,600 youth on topics such as solar energy, coding, power and circuits. These programs helped several hundred Stan State student volunteers connect with their community, apply classroom concepts and enhance their leadership and teamwork skills.



<sup>1</sup> URM populations include African American/Black, American Indian/Alaskan Native, and Hispanic/Latino



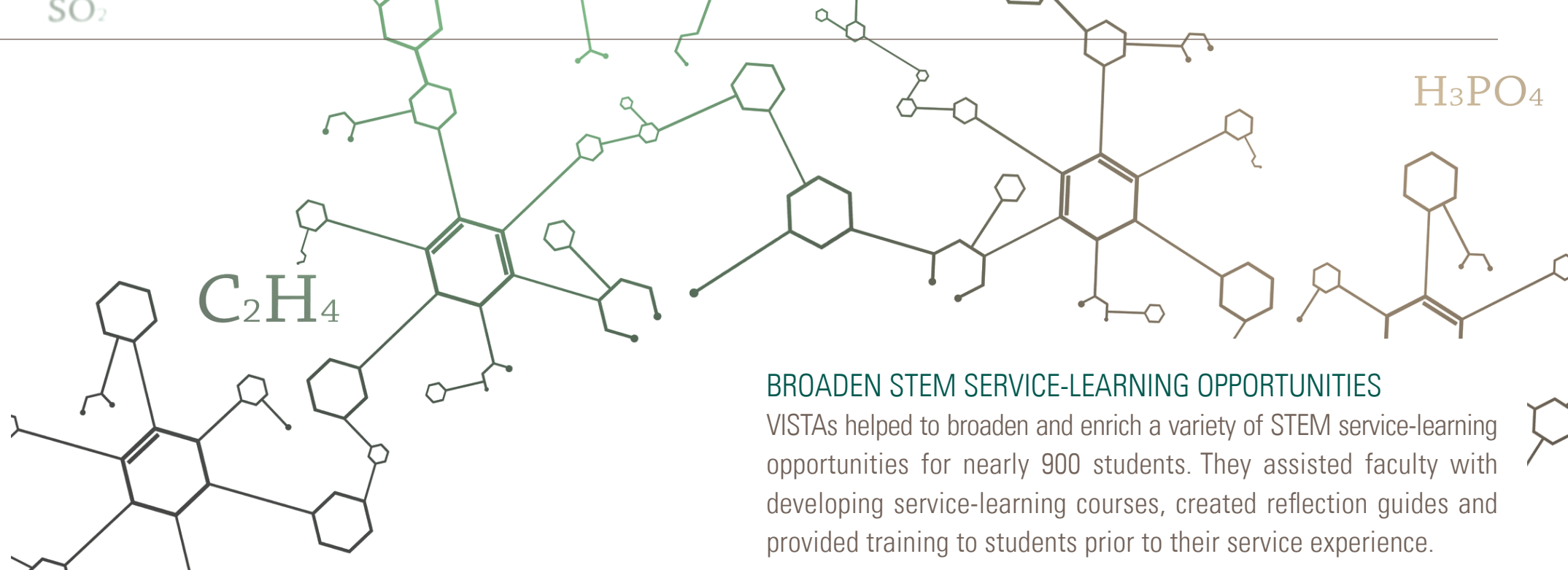
## THE WAYS WE BUILD CAPACITY: WE PARTNER

CSU STEM VISTA members joined together with 491 campus and community partners to develop, strengthen and expand the effectiveness of more than 3,700 hands-on learning experiences.

### INCREASE STEM INTERNSHIP OFFERINGS

VISTAs met with community and industry leaders to develop and support nearly 400 internship opportunities. In addition to securing partnerships, VISTAs prepared students on how to find an internship, refine their resumes, prepare for an interview and land that perfect internship.

*VISTA member Natalie Hambalek expanded the scale and reach of the Science Internship Program at CSU Monterey Bay. She increased community partnerships, provided referrals to career development services and coordinated workshops and class presentations. Natalie also curated and advertised more than 70 internship opportunities and connected 85 science students with more than 20 community partners and employers.*



### BROADEN STEM SERVICE-LEARNING OPPORTUNITIES

VISTAs helped to broaden and enrich a variety of STEM service-learning opportunities for nearly 900 students. They assisted faculty with developing service-learning courses, created reflection guides and provided training to students prior to their service experience.

*Reflecting on her experience in working with K-12 students, Joan Sirma, a San José State service-learning student writes:*

***“Through this experience I increased my knowledge in a wide range of topics and enhanced my communication, collaboration, leadership and problem solving skills.”***



### EXPAND REACH THROUGH TRAININGS

VISTAs designed, coordinated and facilitated 600 trainings reaching more than 7,500 students, faculty, staff, volunteers, community and industry partners. Many of the workshops focused on skill development and supporting the academic and professional success of STEM students. Additionally, VISTAs developed trainings for faculty and staff on a variety of topics, such as a training series on how to support first-generation immigrant students.

*At Fresno State, VISTA members Lillian Senn and Miranda Lopez developed a training series for six Instructional Student Assistants who served as mentors to nearly 100 STEM students. These trainings set the foundation for the peer mentoring program and included topics such as student rights, professional writing, public speaking, effective peer mentoring and team building.*







### COORDINATE PEER MENTORSHIPS

Peer mentor programs encourage students to build strong bonds with their peers and the faculty that will be teaching their courses. VISTAs have shaped the application and matching process, facilitated trainings on effective mentoring strategies and created mentor-mentee events. Their efforts have reached more than 1,300 students.

*I feel tremendously fortunate to have been a part of MEP. I was both a mentee and a mentor during my time at Cal Poly Pomona. My mentor, an engineer at Southern California Edison, is a great inspiration to me. We have many things in common – we are both immigrants, English is our second language and we were both community college transfer students. These shared experiences have allowed us to bond and she has become my role model as a woman in engineering. This relationship inspired me to serve as a peer mentor for freshman students in MEP.*  
**Suthasinee (Sue) Virnig**, Cal Poly Pomona Maximizing Engineering Potential (MEP) program mentee and mentor.

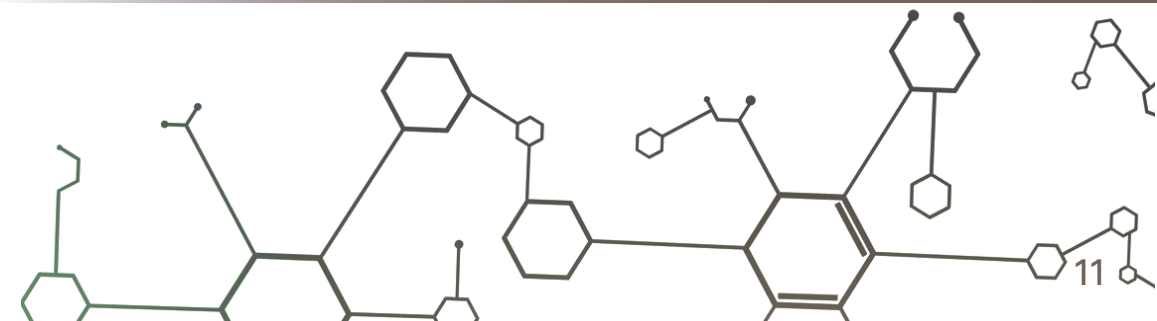


### EMBED EQUITY IN UNDERGRADUATE RESEARCH EXPERIENCES

VISTA members worked to increase accessibility of undergraduate research experiences to more than 700 STEM students by connecting them to research opportunities and crafting workshops for faculty and students.



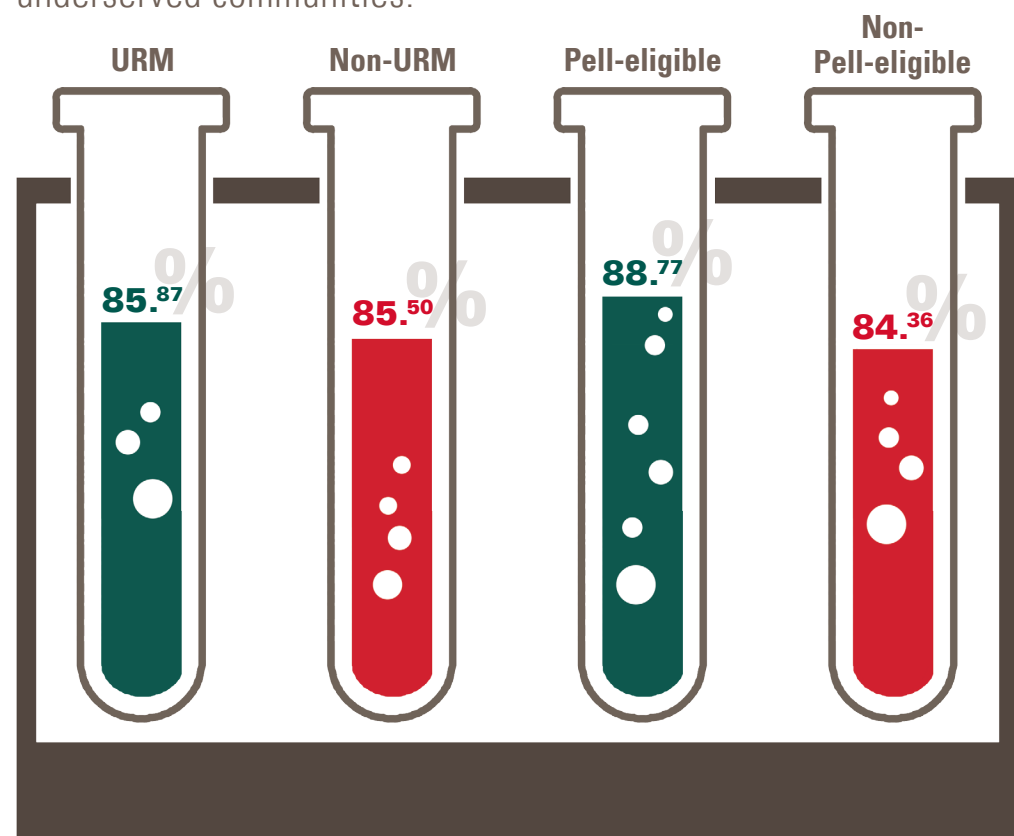
*Nicole Holm, Cal Poly, San Luis Obispo VISTA member developed and led workshops on equitable recruitment and integrating culturally relevant mentoring practices for faculty.*





## THE WAYS WE BUILD CAPACITY: WE LEAD

Of the nearly 35,000 participants in CSU STEM VISTA supported activities, 11,300 were CSU STEM students. Of those 11,300, retention information was available for 2,463 CSU students. There is no question that students who participated in CSU STEM VISTA activities were more likely to remain enrolled in college; this is particularly true for students from historically underserved communities.



### CLOSING THE GAP

The retention equity gap was eliminated for students of color who participated in CSU STEM VISTA supported activities, with 85.87% of URM students retained compared to 85.5% of non-URM. Additionally, 88.77% of Pell-eligible students were retained compared to 84.36% of non-Pell-eligible.<sup>2</sup>

The following campus spotlight points to the impact that a multi-tiered approach, coupling summer bridge with community engagement and a yearlong learning community, has had among first-year students at Humboldt State University.

### CAMPUS SPOTLIGHT: HUMBOLDT STATE UNIVERSITY

VISTA members have helped establish Humboldt State University's Klamath Connection, a place-based learning community for first-time freshmen. Focused on the Klamath River, HSU students learn about the river's history, its significance to our eco system and engage in research and community-based activities that enhance their course understandings and deepen their connection to peers, the campus and the community. The program has seen remarkable results. Students in the Klamath Connection had substantially higher first-year retention rates compared to students in the same majors who did not participate in the program.

<sup>2</sup> Conclusive correlation cannot be determined; students may have participated in a number of activities that contributed to their success.

## THE WAYS WE BUILD CAPACITY: WE ADVANCE

We are tremendously proud of the progress our VISTA members and campuses have made to advance conversations and action focused on equity, diversity and learning in STEM education. But there is still more work to be done.

The CSU has recently undertaken Graduation Initiative 2025, this ambitious enterprise aims to improve student success, increase graduation rates and eliminate equity gaps for all students. CSU STEM VISTA plays an important role in ensuring that all students have the opportunity to graduate in a timely manner, positively impacting their lives, families and communities.

As we look ahead to the next three years, we are focused on tapping into students' talent, drive and motivation to succeed. We are calling on our partners and supporters to join us in enhancing the CSU's commitment to inclusivity, equity and student success in STEM.

Together, we can continue the critical work of fostering cultural and systemic change within the California State University and across our communities. In doing so, the CSU will continue to fulfill its founding mission to produce the college graduates needed to power California's future prosperity.

### VISTA SPOTLIGHT: KAYLA

I am a biracial woman who grew up in a low-socioeconomic home, and was a first generation high school graduate. These salient identities left me surrounded by narratives of 'not being enough'. As a CSU STEM VISTA, I was not just serving the Sacramento State Commit to Study Program, but students with similar backgrounds and identities as my own. They too experienced oppressive narratives. Today, I take what I learned as a VISTA member into the classroom when conversations about underserved students are left out. CSU STEM VISTA gave me more than I could have ever imagined.

**Kayla Montanez**, 2016-17 VISTA member at Sacramento State.







*“Our impact on an individual level may be small, but together I know that our work as CSU STEM VISTAs will be a catalyst for greater change in the CSU system.”*

**Paige Hernandez**, 2015-16 VISTA member at CSUPERB

This report is a tribute to the dedicated faculty, administrators, staff, student leaders, community members, K-12 teachers and industry professionals who are working every day to eliminate race, class and gender disparities in STEM through the CSU STEM VISTA program.

For more information about CSU STEM VISTA:

**[WWW.CALSTATE.EDU/CCE/VISTA](http://WWW.CALSTATE.EDU/CCE/VISTA)**