

## University of California, Santa Cruz HSI-STEM Abstract

### SEMILLA - Teach

The US Department of Education Hispanic-Serving Institution (HSI) Division has awarded UC Santa Cruz (UCSC) HSI Initiatives an additional \$150,000 for two years to support the Latinx STEM Teacher Pipeline. This award will supplement the existing HSI STEM SEMILLA (Science Education & Mentorship In Latino Lives in Academia) grant focused on STEM equity.

To address the severe shortage of Latina/o STEM teachers in K-12 schools in California, we will support aspiring teachers to meet the requirements to apply to a credential program, including a baccalaureate degree in STEM. UCSC has led efforts to create successful trajectories for Latina/o students to become K-12 teachers through our accredited and highly esteemed teacher education Master of Arts in Education/Credential (MA/C) program where students earn both a Master's in Education and a California Teaching Credential in 12-months. Following the success of the MA/C program, we seek to create and strengthen quality pathways for Latina/o students to become K-12 STEM teachers.

The ***SEMILLA Teach Project*** is a collaborative partnership between the UCSC HSI Initiatives, Education Department, Mathematics Department, and the Cal Teach Program. The project objectives include: (1) increase Latina/o enrollment and persistence in Cal Teach, (2) foster and sustain interest among STEM undergraduates in STEM teaching careers, (3) increase acceptance rates of UCSC STEM undergraduates into the MA/C, and (4) support Latina/o students who matriculate in the MA/C program.

The opportunity to strengthen the emphasis of the 2016 HSI-STEM SEMILLA project at the undergraduate level, coupled with the Education Department's strategic focus on developing a Latina/o Teacher Initiative, we propose to focus on increasing the number of *undergraduates* in the K-12 STEM teacher pipeline. This is a promising way to address a shortage of Latina/o STEM teachers in California that aligns with the already funded SEMILLA project. Annually, approximately 60% of the students who enroll in the MA/C secondary math or science programs completed undergraduate STEM degrees at UCSC, and typically more than half of them participated in the UCSC Cal Teach program. Supplemental support for Latina/o undergraduates in Cal Teach would strengthen the pipeline of STEM teachers into the MA/C program, and subsequently into California classrooms.

The ***SEMILLA Teach Project*** will provide Latina/o STEM undergraduates interested in teaching with: (a) supported and streamlined pathways to the Master's in Education and Teaching Credential (MA/C) Program; (b) MA/C participation support for two Latina/o STEM students (one math, one science); (c) presentations and workshops on K-12 STEM teaching pathways, applying to and financing a credential, navigating licensure requirements and other topics; (d) undergraduate research experiences (UREs) in K-12 STEM education; (e) mentorship and networking with K-12 teacher Latina/o; (f) structured mentoring for undergraduate SEMILLA co-leaders in the College Math Academy; (g) tutorial support in two required high-failure-rate upper-division math courses (Math 100-Introduction to Proof and Math 111A-Abstract Algebra); (h) supplemental support and paid internships to participate in Cal Teach.

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