UC SANTA BARBARA



October 13, 2022 <u>Harrison Tasoff</u>

Striving for Inclusion in Statistics and Data Science

Skills in statistics and data science are hot in our modern, information-rich society. However, the formal training required to master these topics is out of reach for many people.

UC Santa Barbara will lead six other West Coast universities to establish PALiISaDS — the Pacific Alliance for Low-Income Inclusion in Statistics and Data Science. The project aims to broaden and diversify training for statistics and data science careers by providing a bridge between undergraduate and graduate programs. The endeavor is supported by a \$5 million grant from the National Science Foundation.

"PALIISaDS solidifies UCSB's status as a regional hub for statistics and data science undergraduate education; raises our national profile; and will greatly expand our departmental diversity, equity and inclusion initiatives," said statistics and applied probability professor <u>Mike Ludkovski</u>, who will lead the program.

A major component of PALiISaDS is financial support for low-income students. Each campus will enroll three cohorts of 5–7 students, recruited in their junior years. The program provides each student with up to \$10,000 per year for two years of undergraduate studies, plus a third year if they continue to a graduate program in statistics or data science within the alliance. The organizers plan to disburse 300 scholarships over the program's six years beginning in fall 2023.

In addition to financial support, PALiISaDS scholars will engage in cohort-building activities, get access to research internship opportunities, and receive help preparing for and applying to graduate schools. Students will be paired with graduate student mentors as well as a faculty mentor for academic, research and career guidance.

The project's ultimate goal is to support underserved students in a burgeoning STEM field that offers good career prospects. "If you want to be a data scientist these days, you need to have a master's or Ph.D.," Ludkovski said. This is difficult for many low-income students. On top of the expenses involved in an advanced degree, many of these students only learn about the realities of pursuing a career in statistics and data science later in their undergraduate experience.

PALIISaDS will integrate with other initiatives at UC Santa Barbara. The university is already leading three other institutions in the <u>Central Coast Data Science Initiative</u>, which supports data science coursework and project-based classes at the community college and undergraduate levels. UCSB also has a multidisciplinary <u>Data</u> <u>Science Initiative</u> that includes an undergraduate capstone project.

The university has also established SEEDS — or <u>Student Engagement and</u> <u>Enrichment in Data Science</u> — a living and learning community for incoming freshman and transfer students interested in data science. "SEEDS targets the first two years of undergraduate experience, while PALIISADS is going to target juniors, seniors and first year grads," Ludkovski said.

"Together with the Data Science capstones, we will have dedicated programs offering academic enrichment and mentoring support to our statistics and data science students the entire way from their first year in college until they're well into graduate studies."

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.