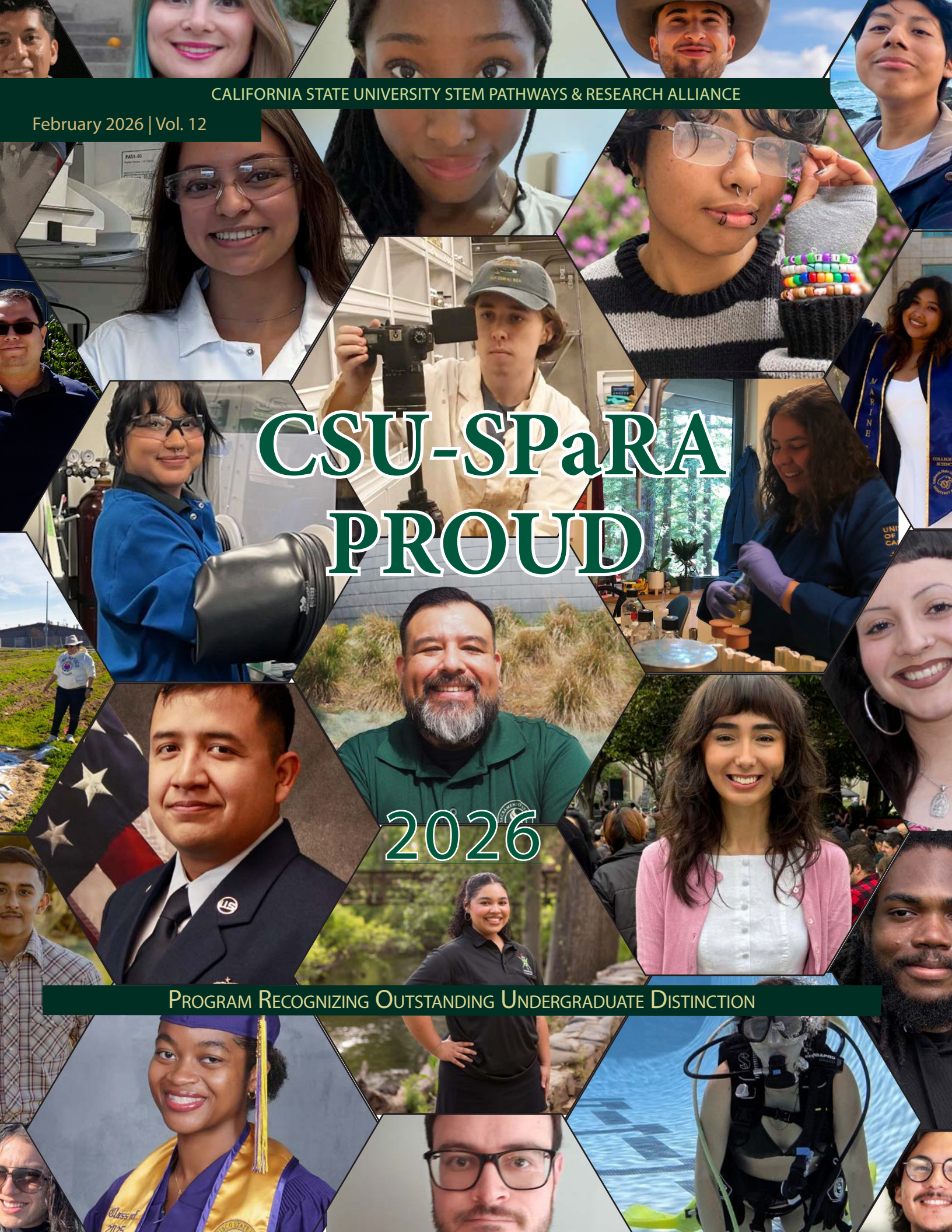

CALIFORNIA STATE UNIVERSITY STEM PATHWAYS & RESEARCH ALLIANCE

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CSU-SPaRA PROUD

2026

PROGRAM RECOGNIZING OUTSTANDING UNDERGRADUATE DISTINCTION

CONTENT

CSU-SPaRA STATEWIDE OFFICE

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This project is supported by the
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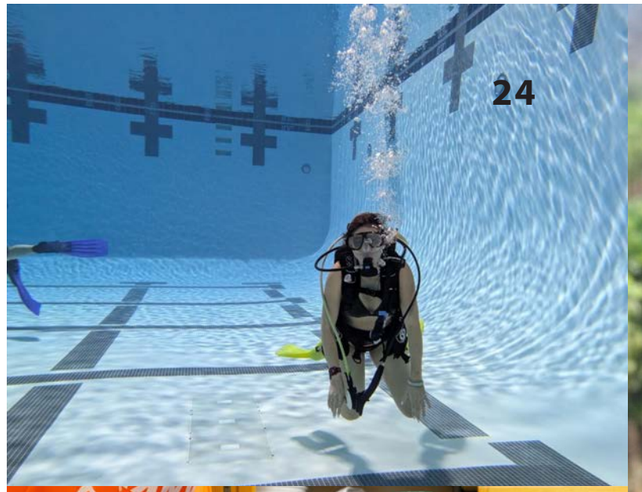

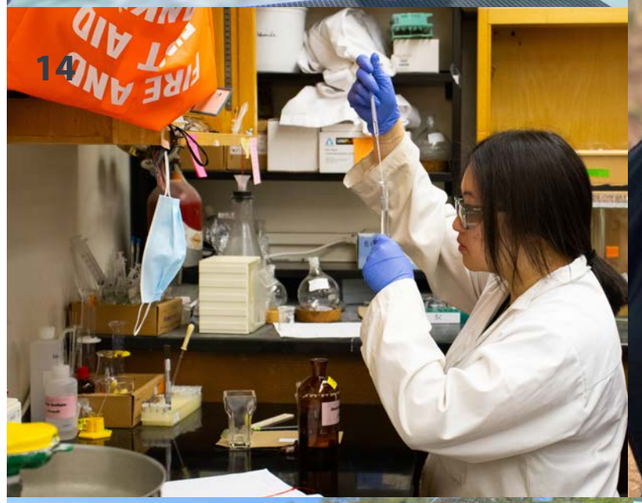

INTRODUCTION

CSU-SPARA

With the support from the Chancellor's Office, the California State University STEM Pathways and Research Alliance (CSU-SPaRA) is a project focused on increasing the number of students with undergraduate and graduate STEM degrees by capitalizing on the strengths of individual campus programs across the CSU. CSU-SPaRA leverages existing campus support structures, including activities that have been institutionalized on each campus, and sharing of best practices across campuses.

CSU-SPaRA continues the work established by CSU-LSAMP (1993-2025) with three overall program objectives:

1. Supporting students at critical transition points in their STEM education (e.g., entering as first-year students, transferring from community college, declaring a major in a STEM discipline) and in STEM "gate-keeper" courses with the goal of improving student performance and persistence in STEM.

2. Supporting students in professionalization by providing opportunities in research, internships, international activities, conferences, leadership roles, professional development, and graduate school preparation activities with the goal of increasing the number of students entering graduate programs and professional careers in STEM.

3. Supporting student experiences important for socialization into STEM careers.

In this twelfth edition of the Program Recognizing Outstanding Undergraduate Distinction (PROUD) publication, the annual magazine of the former CSU Louis Stoke Alliance for Minority Participation (CSU-LSAMP), we recognize the outstanding achievements of CSU students across our Alliance!

During the 2024-25 academic year, program coordinators from each of the 23 CSU campus partners nominated students from their LSAMP programs to be celebrated as PROUD Scholars. The 2025 PROUD Scholars featured in this publication distinguished themselves academically, in research, and in service to their communities during their 2024-25 LSAMP participation.

CSU-SPaRA
California State University
STEM Pathways & Research Alliance

CALIFORNIA STATE UNIVERSITY
STEM PATHWAYS & RESEARCH ALLIANCE

CSU-SPaRA NSF NATIONAL GRADUATE RESEARCH FELLOWSHIP AWARDEES 2025

Diego Ochoa (CPP)
Materials Engineering
University of Southern California

CSU-SPaRA NSF NATIONAL GRADUATE RESEARCH FELLOWSHIP HONORABLE MENTIONS 2025

Xiong Vue (CSUS)
Chemistry
Honorable Mention

Aspiras Alpher (SDSU)
Biology
Honorable Mention

Benjamin Lee (SFSU)
Cell & Molecular Biology
Honorable Mention

Samantha Moreno Sandoval (SFSU)
Zoology
Honorable Mention

CSU Bakersfield

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OUTSTANDING ACADEMIC, RESEARCH IN STEM & SERVICE/LEADERSHIP

ANDREW ALBA · BIOLOGY

Andrew Alba is a biology major from CSUB who has distinguished himself academically , as a research leader,and in service to the Department of Biology, CSUB, and Bakersfield communities. Andrew's research focused on understanding how rapid water loss impacts river wildlife and the Lower Kern River's (LKR) ecosystem. His research received regional to international attention from news media outlets, including the front page of the LA Times, due to documenting multiple mass fish death events in the LKR that runs through Bakersfield, CA. Andrew has mentored over 10 undergraduate CSUB students, has won $5,500 to support his research activities, and has given 7 presentations at scientific conferences. Andrew's service activities included citizen science outreach and river trash cleanup events, mentoring CSUB undergraduate and regional high school students in research, and his research project was in direct response to Bakersfield citizens emphatically requesting ecological research be conducted on the LKR. Andrew also volunteered at CSUB's Veterans Success Center and recently retired from the Air Force Reserves, which he was active on weekends throughout his undergraduate time at CSUB. In addition, Andrew has excelled academically while he concurrently led his research project, conducted service to his communities, and took care of his young family. Andrew's collective accomplishments highlight his determination to overcome challenges, dedication to his education, and passion for science while completing acts of service and fostering community engagement. Andrew started his M.S. degree in biology at CSUB in fall 2025 as his next step towards becoming an environmental scientist.

CALIFORNIA STATE UNIVERSITY, CHICO

OUTSTANDING RESEARCH IN STEM & SERVICE/LEADERSHIP
MIA ELLISON · MECHANICAL ENGINEERING

Mia Ellison is a mechanical engineering student at Chico State, expected to graduate in 2026. Originally from Marysville, CA, she developed a passion for engineering through hands-on projects and leadership opportunities. She chose Chico State for its strong focus on applied engineering and research. Mia joined LSAMP in June 2022 by participating in the Summer Calculus Boot Camp and actively engaged in academic and leadership pursuits. She consistently demonstrated academic excellence while balancing research and involvement in student organizations. As a research assistant in the Civil Engineering Department, she studied the aging and oxidation performance of asphalt rubber binder made from recycled waste tires. She conducted laboratory testing using equipment such as the DSR machine, UV oven, and asphalt analyzer. She presented her findings at university symposiums. Most recently, she showcased her work at the National Society of Black Engineers Technical Research Exhibition in Chicago, IL. Beyond research, Mia remained committed to promoting diversity and professional growth in STEM. She served as President of the National Society of Black Engineers (NSBE), leading initiatives to support underrepresented students through networking events, industry partnerships, and mentorship programs. She also served as Secretary of the Materials Research Society and mentored first-year engineering students, guiding them through academic and professional challenges. Additionally, she worked as a teaching assistant and grader for materials science and mathematics courses. After graduation, Mia aimed to apply her engineering skills in sustainable materials and energy systems while continuing to advocate for diversity and inclusion in STEM.

OUTSTANDING ALUMNUS
MARCUS BATTRAW · MECHATRONIC ENGINEERING AND MATHEMATICS

During Marcus Battraw's undergraduate studies at Chico State, he participated in the LSAMP program, where one of the most impactful aspects was the opportunity to conduct research with financial support. Under the guidance of a faculty member in the Department of Mathematics and Statistics, he completed a semester-long research project. This first exposure to research played a key role in shaping his passion for scientific inquiry and, along with other formative experiences, led him to pursue a Ph.D. in biomechanics at the University of California, Davis. As he neared the end of his doctoral program, uncertainty about his career path prompted conversations with mentors and colleagues. A pivotal discussion with David Alexander, the new Dean of the College of Engineering, Computer Science, and Construction Management at Chico State, inspired him to apply for a faculty position at his alma mater. After earning his Ph.D. in 2024, he accepted a tenure-track role as an Assistant Professor in the Department of Mechanical and Mechatronic Engineering and Advanced Manufacturing at Chico State. In this position, he taught and mentored students, while sharing his enthusiasm for research. His work focused on developing sensor fusion techniques to predict hand movements, aimed at enabling intuitive control of prosthetic upper limbs.

OUTSTANDING ALUMNA
YOANA BATTRAW · ELECTRICAL ENGINEERING & PHYSICS

Yoana's journey with LSAMP began in the summer of 2016, when she traveled 700 miles from home to attend a 10-week Calculus Boot Camp. That formative summer in Chico not only strengthened her math skills but also forged lasting friendships, easing her transition into college. LSAMP became a vital support system, offering academic resources, research opportunities, and the confidence to navigate higher education as a first-generation student. Through LSAMP, she met Lori, then the campus director, who became a valued mentor. Early exposure to campus life and rigorous academics helped her excel in courses like calculus and physics, leading to research opportunities such as CSC^2's undergraduate program in the Ultracold Atom Lab. She later expanded her research at Woods Hole Oceanographic Institution through the Partnership Education Program and Summer Student Fellowship, where she modeled phytoplankton ecosystems and presented at conferences like the American Physical Society's Western Chapter. She also served as a learning assistant, Supplemental Instruction leader, and actively participated in student organizations including SPS, SWE, and IEEE-HKN. At the physics department's Hands-On Lab, she led STEM workshops for 4th and 5th graders. Mentorship, from LSAMP to the MESA Engineering Program (MEP), was instrumental in her growth and eventual completion of dual bachelor's degrees in electrical engineering and physics. As MEP's Professional Development Coordinator, Yoana now provides academic advising, coordinates research and industry engagement, and supports professional development, empowering the next generation of students.

OUTSTANDING ACADEMIC SUCCESS
ERIC FLORES ZARAGOZA · CIVIL ENGINEERING

Eric Flores Zaragoza is completing his second year at Chico State, where he is pursuing a major in civil engineering with an emphasis in structural engineering and a minor in heavy construction, and is track to graduate in spring 2027. As a first-generation college student, Eric began his collegiate career by participating in the 2023 LSAMP Summer Calculus Boot Camp. Participating in the LSAMP camp drove Eric towards academic growth; later being recognized by Chi Epsilon (Civil Engineering Honor Society) and earning his spot on the Dean's list. His passion for heavy civil construction and drive for professional experience led him to his first summer internship where he worked as a project engineer intern for Granite Construction, where he managed two projects. The projects consisted of bridge demolition and reconstruction as well as highway widening and realignment; where he collaborated with Caltrans, contributing to the expansion of American infrastructure. Eric is currently set on continuing his career in the construction field and will be interning with O.C. Jones & Sons, an engineering contractor. Throughout his career at Chico State, he has participated in campus organizations such as the Beavers Student Chapter and MESA. Eric is currently committed to pursuing his engineering degree at Chico State and seeks to expand his expertise in infrastructure development.

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California State University DOMINGUEZ HILLS

OUTSTANDING RESEARCH IN STEM & ALUMNUS
ANDREW FAIRCLOUGH · ECOLOGY & ENVIRONMENTAL BIOLOGY

Andrew Fairclough graduated from CSU Dominguez Hills with a B.S. in ecology and environmental biology. His academic and research interests centered on the conservation of California's native wildlife, particularly in the context of climate change.

While at CSU Dominguez Hills, Andrew contributed to Dr. Sonal Singhal's research on hybridization in California's brittlebushes (genus *Encelia*) and was an active member of the Phi Sigma Biological Honors Society. In the summer of 2023, he completed an REU at the University of California, Berkeley, where they developed a computational pipeline to align DNA sequences to a reference genome, enabling analysis of differential gene expression during plant-fungal symbiosis. In the summer of 2024, Andrew participated in a research REU at Yale University, contributing to a largescale greenhouse experiment involving 1,000 plants under the supervision of Dr. Jennifer Coughlan.

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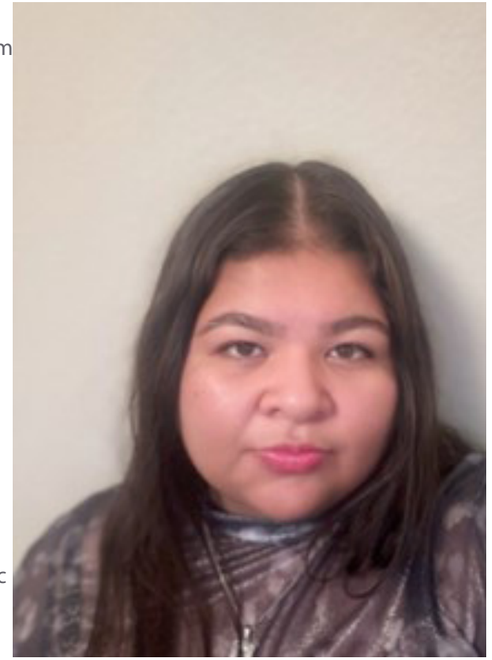
OUTSTANDING RESEARCH IN STEM
VINCENT ESPINOZA · CELLULAR & MOLECULAR BIOLOGY

Vincent Espinoza is currently majoring in cellular and molecular biology with a minor in biochemistry and is expected to graduate in spring 2026. At CSU Dominguez Hills, he has immersed himself in the scientific community by serving as President of the Chemistry & Biochemistry Club, becoming a U- RISE Scholar, and joining the LSAMP program. His research journey began in January 2024 in Dr. Erin McCauley's natural products lab, where he gained a multidisciplinary perspective on scientific research. Vincent has developed skills in microbiology, biochemistry, and analytical chemistry. He showcased his work at the university's annual student research conference, earning 1st place for overall poster presentation for his research on the secondary metabolites produced by fungi living within Macrocystis pyrifera
(Giant Kelp). In Summer 2024, Vincent completed a molecular imaging internship at UCLA, focusing on novel cancer screening techniques using antibiotic markers. In Summer 2025, he participated in another REU at George Washington University, where he worked on synthesizing novel scaffolds designed to bind proteins for cancer research applications. After graduation, Vincent plans to continue his passion for science by pursuing a Ph.D. in biomedical sciences. Through his doctoral studies, he aims to contribute to the development of novel cancer therapeutics and drive innovation in the biomedical industry.innovation in the biomedical industry.

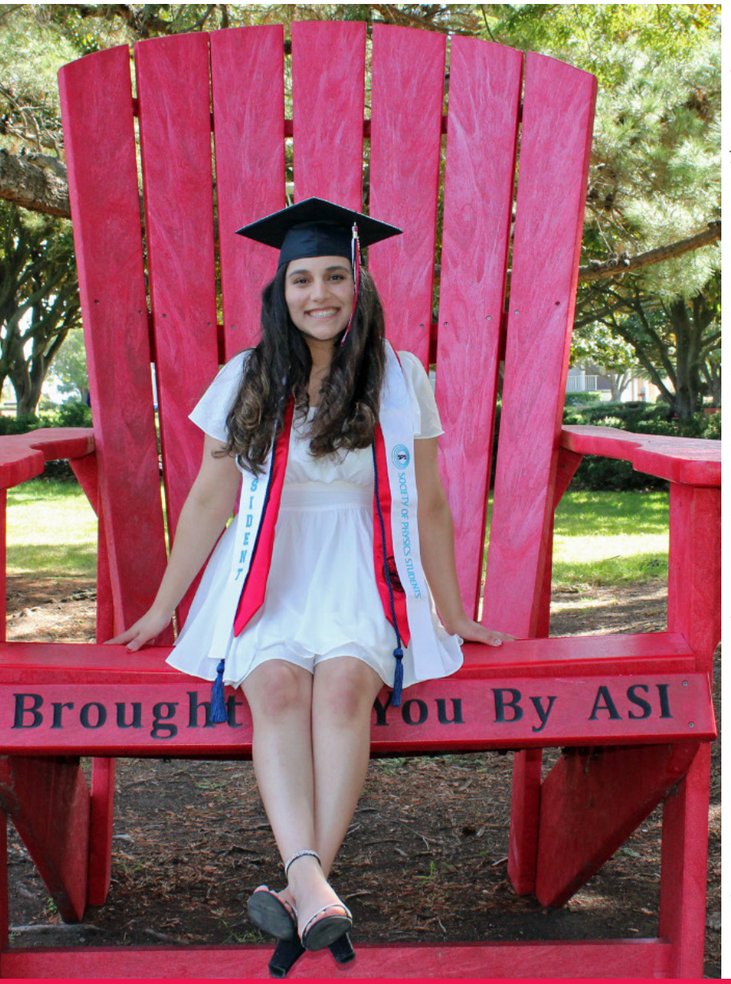
OUTSTANDING ACADEMIC
VANESSA ZAMORA · PHYSICS

Vanessa Zamora is a first-generation Mexican American and a general physics major at CSU Dominguez Hills. Originally from Lynwood, CA, she discovered her passion for physics during her senior year of high school and has pursued it with dedication ever since. Throughout her undergraduate studies, Vanessa has consistently demonstrated academic excellence, earning a place on the Honors List for eight out of ten semesters. Under the mentorship of Dr. Lamar Glover, she has been an active member of the Biocharge research group, which focuses on converting waste biomass into carbon-based materials for use in electric energy storage devices. Vanessa's research has been recognized at multiple academic conferences. In 2024, she earned first place in her session for her poster presentation at the CSU Dominguez Hills Student Research Conference. In 2025, she and collaborator Fabian Rodriguez won first place in their oral presentation session. In addition to conference participation, she has co-organized and presented educational workshops, including the Biochar Art Workshop (in collaboration with Brackish Water Los Angeles at the University Art Gallery) and the Soil Amendment Workshop at El Sereno Community Garden. She also presented research at the 2024 Joint Conference of the National Society of Black and Hispanic Physicists in Houston, Texas. Through her research experience, Vanessa has developed valuable skills in teamwork.



CALIFORNIA STATE UNIVERSITY
EAST BAY

OUTSTANDING ACADEMIC, RESEARCH IN STEM & SERVICE/LEADERSHIP
JASMINE ASFOUR-PALACIOS • PHYSICS



Jasmine Asfour-Palacios is majoring in Physics with a minor in Astronomy at CSU East Bay and graduated *summa cum laude* in May 2025. Jasmine has de-liberately chosen to make research opportunities the cornerstone of her journey in physics, igniting a profound passion that fueled her ambition to pursue a Ph.D. Each experience, whether conducting astrophysics research at UC Santa Cruz, exploring cosmology at McGill University, or studying nuclear astrophysics at Lawrence Livermore National Laboratory (LLNNL), equipped her with essential hands-on skills and multidisci-plinary perspective.

At CSU East Bay, Jasmine joined Dr. Arran Phipps' research group, where she contributed to the development of low-noise, cryogenic charge amplifiers or dark matter detection. This hands-on experience deepened her understanding of circuit design and construction. She also worked with Dr. Phipps to support the Eos neutrino detector under development at the University of California, Berkeley. As part of the student research team, Jasmine collaborated with Dr. Phipps to improve the muon lifetime experiment, helping to implement a new data acquisition system using the Liquid Instruments Moku platform. This system flexibility to the data acquisition process, allowing students to perform advanced analysis beyond simply measuring muon lifetime, such as exploring the pulse height distribution of scintillator events. These experiences solidified Jasmin's interest in experimental physics and provided her with valuable technical skills. She began her Ph.D. at University of California, Davis, where she continues exploring nuclear physics through research and collaboration.

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OUTSTANDING RESEARCH IN STEM
KYLEA HALBROOK-GILBERT • BIOLOGICAL SCIENCES

Kylea Halbrook-Gilbert is a fourth year student majoring in biological sciences at CSU East Bay. As a first-generation and low-income college student, Kylea never imagined she would have the opportunity to pursue higher education. Her mother, a driving force in her academic journey, often reminded her that while a person can lose everything, no one can take away their education. With this mindset and the support of programs like MESA, BET McNair, LSAMP, and the East Bay OSCAR Scholar Program, Kylea received the tools to navigate college, access opportunities, and pursue her passion for science. Kylea was introduced to research through the HSI-STEM Summer Research Program, a partnership between Chabot College and CSU East Bay, which led her to join the Jenkinson Lab. She supported the lab's ongoing projects on the amphibian-killing pathogen Batrachochytrium dendrobatidis (Bd), and later led a collaborative project with the San Francisco Zoo studying infection and treatment in yellow-legged frogs. Building on this experience, Kylea took on a project developed with her professor, investigating ribosomal gene copy number variation across Bd strains using techniques such as DNA extraction and qPCR. Her time in the Jenkinson Lab has shaped her growth as a scientist, deepened her curiosity, and strengthened her confidence in pursuing research.

OUTSTANDING RESEARCH IN STEM
JOSE LUIS ZARAGOZA-CALDERON JR. • COMPUTER ENGINEERING

Jose Luis Zaragoza-Calderon Jr., is a first-generation college student studying computer engineering at CSU East Bay. He was born and raised in San Jose, CA, where he developed a deep interest in how things work and a strong desire to solve real-world problems through science and technology.

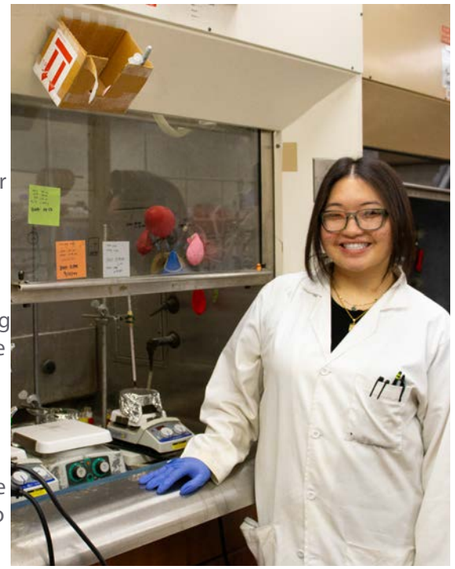
At CSU East Bay, he became involved in research under the guidance of Dr. Derek Kimball and works on a project that is part of the Global Network of Optical Magnetometers for Exotic Physics Searches. This international research group is searching for signs of dark matter using a network of highly sensitive magnetic sensors placed in different parts of the world. His work has focused on testing and improving a sensor that uses three types of atoms: potassium, rubidium, and helium-3 to detect very small changes in magnetic fields th t might be caused by dark matter.

Jose described his research experience as the most meaningful part of his academic journey. Through this experience, he developed his critical thinking skills and solidified his commitment to a future in research. He aspires to pursue graduate studies where he can continue to develop his expertise and contribute meaningfully to the scientific community.

FRESNO STATE

Discovery. Diversity. Distinction.

OUTSTANDING RESEARCH IN STEM
JASMINE HANG · CHEMISTRY



Jasmine Hang received her B.S. in biology from Fresno State in the fall of 2022 and her M.S. in chemistry in spring 2025. As an undergraduate, she joined Dr. Qiao-Hong Chen's medicinal chemistry research group where she received her first co-authored publication, "Synthesis and Biological Evaluation of Niclosamide PROTACs.. During her undergraduate career she participated in LSAMP and RISE programs. Jasmine solidified her career in chemistry during her three-month research internship through the Visiting Faculty Research Program at Princeton University under the mentorship of Dr. Chen and Dr. Erik Sorensen. She worked on a new total synthesis project where she began the synthesis of a critical precursor for tetracyclic bis-piperidine alkaloids. Jasmine presented at several conferences, including SACNAS NDiSTEM, where she was awarded Outstanding Undergraduate Research Poster Presentation for Organic Chemistry. As she advanced to her masters program, she continued her research with Dr. Chen, working on a collaborative thesis project with Dr. Kit Lam at UC Davis, exploring one-bead-one-compoud libraries Inspired by Zampanolide for early cancer drug discovery.. Jasmine will continue her studies at the University of Wisconsin-Madison's Chemistry PhD program with goals to pursue a career in medicinal chemistry in the pharmaceutical industry.

OUTSTANDING RESEARCH IN STEM
LORENT D. ESPINOZA · PLANT SCIENCE

Lorent D. Espinoza received her B.S. in plant science at Fresno State in spring 2025. As an LSAMP research scholar, Lorent distinguished herself through innovative research that addresses California's urgent water scarcity. Under the mentorship of Dr. Ranjit S. Riar, she developed an experiment focused on reducing evaporation rates from still water bodies, such as reservoirs, by covering their surface with living biomass. This eco-conscious method offers a dual benefit: preserving water during periods of extreme heat and potentially enriching surrounding soil with organic matter. Lorent's research contributed a practical, climate-smart solution to one of the Central Valley's most pressing agricultural challenges. Prior to her academic achievements, Lorent served in the U.S. Army and completed two tours in Afghanistan. Her military background instilled a deep sense of discipline, resilience, and strategic planning, qualities that shaped her scientific approach. As a first-generation student and non-traditional scholar, she overcame significant life obstacles, channeling her leadership skills and life experience into academic excellence and research innovation. Lorent's work bridged the gap between field-based agricultural knowledge and applied scientific research. Her commitment to improving sustainable water management practices in agriculture reflects both her personal mission and professional trajectory. Lorent aspires to use her training to assist underserved communities and advance equity in agricultural development.

OUTSTANDING RESEARCH IN STEM
CHAESON SEARS II · MECHANICAL ENGINEERING

Chaeson Sears II earned his B.S. in mechanical engineering from Fresno State in May 2025. Chaeson was introduced to research through Fresno State's LSAMP and RISE programs, which allowed him to explore college campuses, talk to graduate students and meet prospective PI's for graduate school. He has had the pleasure of working with Dr. The Nguyen in the mechanical engineering department, who has a focus on biomedical engineering. Under his guidance, Chaeson was able to flourish as a researcher, developing affordable prosthetics for trans radial amputees, using 3D printing technology. This project was very interdisciplinary, consisting of mechanical engineers, electrical engineers, computer scientists and biologists, which allowed him to explore diverse disciplines through his undergraduate research. Chaeson also had the opportunity to participate in an REU during the summer of 2024 at the University of Maryland College Park, where, he worked with Dr. Ross Miller in the Biomechanics department assessing the capabilities of motion capture software OpenCap, to analyze the biomechanics of patients with different lower limb prosthetics. These experiences helped shape his research interest and encouraged him to pursue an M.S. in robotics and autonomous systems at Boston University. Chaeson aspires to use his education to excel his career by developing life-changing medical devices.

OUTSTANDING RESEARCH IN STEM
JOSE MILLAN · ANIMAL SCIENCE

Jose Millan completed his B.S. in animal science from Fresno State in December of 2024. Jose's interest in animal genetics was sparked while participating in an animal science related internship which helped expose him dto the field of poultry genetics. Jose participated in the LSAMP at Fresno State Research Program where he was introduced to research. As a trainee, Jose began genetics research under the mentorship of Dr. Alejandro Calderon-Urrea where he investigated the molecular mode of action (MOA) of Chalcones 17, 25, and 30 on Caenorhabditis elegans. The project involved inducing mutations in C. elegans using ethyl methanesulfonate (EMS) and isolating mutants that exhibited resistance to high concentrations of the chalcones followed by DNA analysis to identify potential genes linked to chalcone resistance. This work highlights important groundwork for understanding the molecular mechanisms through which these chalcones exert their lethal effects on C. elegans. Jose continues his academic journey pursuing an M.S. degree in agricultural science at Fresno State with aspirations to continue a Ph.D. focusing on poultry genetics.

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CALIFORNIA STATE UNIVERSITY FULLERTON™

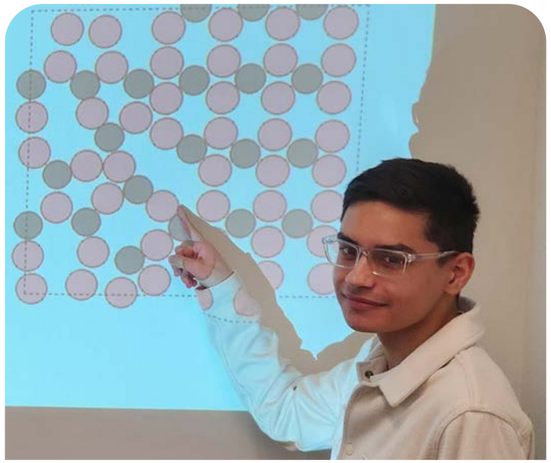
OUTSTANDING ACADEMIC
ABEL DANIEL · COMPUTER SCIENCE

Abel Daniel is a senior computer science major at CSU Fullerton. He is a second-year researcher and LSAMP Scholar, and he has been mentored by Dr. Anand Panangadan. He utilized machine learning and natural language processing on a previous project to detect food posts across social media to analyze individual dietary behavior. He presented this project at Southern California Conferences for Undergraduate Research, was selected as a finalist or the Student Project EXPO, and was awarded the NSM Award. Currently, Abel is researching how sensor data and machine learning can be used to track in-home motion, in order to make homes safer for elderly persons. His capstone project is the development of a website with real-time location-based transit system that uses machine learning algorithms to better estimate bus arrival times. Abel would like to work more on machine learning and artificial intelligence developing projects that are useful. The LSAMP program helped his future by guiding him, making it possible to work on projects and encouragement within it.

OUTSTANDING COMEBACK
ALEX BYUNG MOON JUN
MATHEMATICS

Alex Byung Moon Jun is a mathematics major at CSU Fullerton, who applied statistical modeling and machine learning techniques to address real-world challenges. In his research, he developed predictive models to assess bridge column damage using methods such as LASSO regression and neural networks, contributing valuable insights for infrastructure safety. He also explored factors influencing Alzheimer's disease diagnosis by analyzing large health datasets and building statistical models that improved predictive accuracy. These efforts culminated in an R pack-age to streamline data analysis. Alex expanded his research experi-ence through a summer 2024 REU program at the University of California, Irvine, where he collaborated with interdisciplinary teams on innovative projects. His work was showcased at several conferences, reflecting his ability to translate complex analytical methods into practical solutions. Beyond his research, he mentored peers as a teaching apprenticeship and actively contributed to his academic community at CSU Fullerton. He continues his education at UCLA by pursuing a master's degree in applied statistics and data science.

OUTSTANDING ACADEMIC & RESEARCH IN STEM
DOMINIC MILLA · BIOCHEMISTRY



Dominic Milla, a senior in CSU Fullerton's Biochemistry program, performed computational research under Dr. Michael Groves on the morphology of hole defects in B2C. This was done through a methodology incorporating a neural network and evolutionary algorithm to generate potential structures and determine which are most stable. He has presented this work at the American Physics Society (APS) and Material Research Society (MRS) conferences and earned the American Institute of Chemists Award and the ACS Undergraduate Achievement in Biochemistry or Chemical Biology Award. He accepted the offer to pursue a degree in the University of Riverside's (UCR) Biochemistry and Molecular Biology Graduate program and intends to incorporate his computational background with research into life processes at the molecular level.

OUTSTANDING ACADEMIC & RESEARCH IN STEM
KHUSHI KAUSHIK · COMPUTER SCIENCE

Khushi Kaushik is a dedicated researcher in machine learning, com-puta-tional complexity, and data science. While pursuing her B.S. in computer science at CSU Fullerton, she has earned research honors fellowships through LSAMP and SoCal Data Science at UC Irvine. Her early research delved into the Fractran Turing-complete model, investigating ways to approximate halting problems using iterative number theory and optimization methods like Newton-Raphson, which she presented at the Southern California Conferences for Undergraduate Research (SCCUR), Joint Mathematics Meetings (JMM) 2025 and National Conference for Undergraduate Research (NCUR), the world's largest mathematics conference. Fractran laid the foundation for her broader interest in explainable and com-putationally grounded Algorithms and AI systems. In applied domains, Khushi led statistical modeling for a clinical study on cognitive decline after cardiac surgery, identifying inflammatory biomarkers where she performed Principal Component Analysis to identify inflammatory biomarkers predictive of cogni-tive decline. The paper was submitted to the Western Thoracic Surgical Associ-ation (WTSA) 2025/51st Annual Meeting. Beyond research, Khushi served as an instructional student assistant and peer tutor, supporting courses in data struc-tures, linear algebra, and artificial i telligence. She mentored students one-on-one, helping them deepen their conceptual understanding while reinforcing her technical foundation and contributing to a collaborative academic environ-ment. In fall 2025, Khushi began her M.S. in computer science and engineering at UC San Diego. Her goal is to advance ethical, interpretable, and scalable AI systems, bridging theory and practice to shape the next generation of reliable machine learning tools.

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Cal Poly Humboldt.

OUTSTANDING ACADEMIC & RESEARCH IN STEM
ALICIA LIZARRAGA · FISHERIES BIOLOGY

Alicia Lizarraga is a fisheries biology major with a concentration in aquaculture at Cal Poly Humboldt. She is a first-generation college student and a member of the Indian Natural Resources, Science, and Engineering Program (INRSEP). Alicia has contributed to multiple research projects focused on fisheries biology during her time at Cal Poly Humboldt and is particularly passionate about sustainable shrimp aquaculture. Alicia has worked with a variety of marine life, and her presentations include the following titles: The Effect of Temperature on the Gametophyte and Sporophyte Development of Alaria marginata; Sperm Cryopreservation of Pacific Oyster and Red Octopus Growth Rates on Three Varying Diets of Sand Shrimp, Pacific Intertidal Crab Species, and a Combination of Both. In fall 2024, Alicia conducted research on the effect of diet on the growth rates of red octopi under the direction of Dr. Rafael Cuevas Uribe. In spring 2025, she completed an independent study in which she designed and built a recirculating aquaculture system with biofloc technology. She utilized local sand shrimp (*Crangon franciscorum*) for this project. This work was presented at the authors hall as: Freshwater to Salt Water Conversion in RAS: A Biofloc Approach to Sand Shrimp Cultivation. Alicia Lizarraga was named a Presidential Scholar in 2024 and selected for the COMPASS STEM STARS program 2024-2025.

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OUTSTANDING ACADEMIC & RESEARCH IN STEM
ASHTON PERFECTO · OCEANOGRAPHY

Ashton Perfecto is an oceanography major at Cal Poly Humboldt. In 2023, Ashton was selected as a McNair Program Scholar. In 2024, he completed an REU at the Doerr School of Sustainability at Stanford University with Dr. Mohamad Bazzi. His work focused on digitizing specimens and interpreting statistical visualizations of morphospace and ecomorphological variation using Generalized Procrustes Analysis (GPA) followed by Principal Component Analysis (PCA) to detect changes in skate morphology. Ashton presented his skate research at the Stanford SURGE Symposium and the University of New Mexico McNair Scholars Research Conference. In 2024, he conducted scientific outreach as an invited student presenter on ocean acidification at the Sue-Meg State Park Indigenous Science Weekend. From 2021-2025, Ashton won multiple scholarships and honors. In both 2024 and 2025, Ashton earned the status of Cal Poly Humboldt Presidential Scholar; the Paul Valentich-Scott Scholarship, and the Undergraduate Student Research Award in 2024; two scholastic scholarships in both 2021 and 2023; and The California State Civic Seal of Engagement in 2021. For his capstone, Ashton studied the presence and persistence of dioxins at Wigi (Humboldt Bay) mill sites by performing multiple analytical chemical procedures on mud samples from around the Humboldt Bay shorelines while also facilitating the proposal and report writing as the primary editor, all under the direction of Dr. Tamara Barriquand and Daniel O'Shea. He was also selected for the Applied Physics Laboratory REU at the University of Washington in summer 2025.

OUTSTANDING ACADEMIC & RESEARCH IN STEM
TRINITY EDWARDS · RANGELAND RESOURCE SCIENCE

Trinity Edwards is a rangeland resource science major with a soil science concentration and geospatial science minor at Cal Poly Humboldt. She is a first-generation college student and a member of COMPASS, STEM STAR, and the Indian Natural Resources, Science, and Engineering Program (INRSEP). Trinity's work with Dr. Justin Luong's lab in 2025 investigated sustainable grazing practices as an alternative to herbicidal control of invasive plants to protect the endangered Nipomo Mesa lupine (Lupinus nipomensis). As a result of her research, she has presented findings at the Cal Poly Humboldt 2025 IdeaFest, the Grassland Restoration Action Science and Stewardship Network (GRASS-Net) 2025 Field Day, and the California Society of Ecological Restoration (SERCAL) 2025 Conference. During her summer 2024 internship with USDA-ARS in Burns, Oregon, Trinity collected field data on sagebrush steppe ecosystems, mastering line-point intercept surveys and biomass analysis techniques. Her academic training in geospatial tools (ArcGIS, ENVI) and soil science complemented her hands-on research. Also in 2024, Trinity applied her academic training in a ranch management plan that proposed grazing rotations and rainwater catchment systems. Trinity balanced rigorous coursework, earning Presidential Scholar and Dean's List honors, while mentoring peers as an officer for the Range and Soils Club at Cal Poly Humboldt. Additionally, she has uplifted her community through volunteering with Special Olympics Northern California. Her commitment to inclusive STEM was reflected in her roles with LSAMP and STEM STAR, where she supported her fellow students while under the mentorship of STEM STAR graduate students and LSAMP staff.

CALIFORNIA STATE UNIVERSITY **LONG BEACH**

OUTSTANDING RESEARCH IN STEM
DAISY SALMERON · MECHANICAL ENGINEERING

Daisy Salmeron is a fourth year mechanical engineering major at CSU Long Beach. As a member of the LSAMP Fellows program, Daisy conducted research in Dr. Perla Ayala's Therapeutic and Regenerative Systems research group in the Department of Biomedical Engineering, over summer 2023 and the 2023-24 academic year. Daisy collaborated with teammates to develop and refine a protocol for creating in-house alginate based inks, enabling students to 3D print scaffolds and conduct their experiments more effectively. In 2024, she joined a new research project to explore projects in composite materials. Under Dr. Surajit Roy, in the Department of Mechanical and Aerospace Engineering, Daisy manufactured composite samples composed of e-glass fiber with epoxy resin mixed with nano-silica, copper oxide, and multi walled carbon nanotubes (MWCNT) powder at different increments using the wet layup method and tested their tensile strength and deformation behavior. In addition, Daisy was accepted to the Department of Defense HBCU/MI Summer Research Internship Program in summer 2024 in Albuquerque, New Mexico. As an intern, Daisy analyzed and listed the strengths and weaknesses of current instrumentation to build a guide map for future defense instrumentation testing capabilities and ensure equipment was up to date. She presented findings in oral and poster presentations at their annual Intern Symposium & Conference. These experiences further fueled Daisy to seek opportunities to develop her skills in research, presenting, and networking. After graduation, Daisy plans to pursue her master's degree and work in the defense industry as a test engineer.

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OUTSTANDING ALUMNUS
MARCELL CADNEY, PH.D. · BIOLOGY

Dr. Marcell Cadney is a CSU Long Beach alumnus class of 2013. He was an LSAMP Research Fellow in 2010 in Dr. Ashley Carter's Lab where he conducted a comparative literature survey of mammalian brain size allometric data. As an LSAMP Fellow, Marcell received guidance on presentation and communication skills and with results from his work in Dr. Carter's lab, he was accepted to present at national conferences. For instance, Marcell won a presentation award at ABRCMS. After graduating, Marcell interned at the LA National History Museum before starting UC Riverside's Evolution, Ecology, and Organismal Biology Ph.D. program with Dr. Ted Garland, where he was supported by the Eugene Cota Robles fellowship and earned the NSF GRFP award. His dissertation focused on studying the potential for early-life effects on a novel exercise physiology model in laboratory mice selectively bred for high voluntary wheelrunning behavior in what is now the longest running artificial selection experiment on vertebrates in the world. After completing his Ph.D., Marcell started a postdoctoral fellowship at UC Santa Barbara before returning to CSU Long Beach as an assistant professor of biology in the Department of Biological Sciences. He now serves as mentor to students in his first independent research laboratory with projects ranging from animal behavior, neuroscience, biomechanics, microbiome physiology, molecular evolution, and behavioral endocrinology.

OUTSTANDING RESEARCH IN STEM & SERVICE/LEADERSHIP
NOAH BENASFRE · MARINE BIOLOGY

Noah Benasfre is a junior marine biology major at CSU Long Beach. Noah is committed to environmental conservation and advocacy in coastal ecosystem protection, which is reflected in his research experiences. He joined the Stingray and Butterfly Biomechanics (SABB) Lab with Dr. Benjamin Perlman in August 2023 and has contributed to the experimental design of procedures and data collection for round stingray biomechanics projects. Noah also worked on stingray tail strike kinematics, barb morphology, and material testing and development of surf booty. Over summer 2024, Noah completed research at the Hopkins Marine Station with the CSU Monterey Bay Ocean Science Research Experiences for Undergraduates program. While at the Hopkins Marine Station, Noah developed custom MATLAB scripts to process biologging tag data using real-time animal movement parameters for visualization of blue whale kinematics and used R programming to analyze the data. This uncovered insight into blue whale metabolic activity which can be used to understand their physiology, behavior, and support conservation efforts. In addition to Noah's involvement with research, he is a leader on campus. Noah has served as a mentor to high school and first-year college students in the Bridge Builders Foundation. He was a panelist on undergraduate research experiences and student representative of the College of Natural Sciences and Mathematics DEIA Task Force. He is the current president of the Queer Students' Alliance and is involved with La F.U.E.R.Z.A. Student Association, Transgender Empowerment and Advocacy, Color Me Queer, and Marine Biology Student Association at CSU Long Beach.

CAL STATE LA

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

OUTSTANDING SERVICE/LEADERSHIP & RESILIANCE

ALEXCIA GARCIA · BIOLOGY

Alexcia Garcia is a third year Biology major pursuing a B.S. in biology with a microbiology option. She plans to enroll in an MD/PhD degree program after her graduation. She has been a participant in LSAMP since her first year at Cal State LA, participating in the 2023 LSAMP Summer Research Scholars Program and then the LSAMP Data Science Scholars Program in Spring 2024. In fall 2023, she stepped forward to support the LSAMP program as student assistant and she quickly became an integral member of the team while we were rebuilding the program. Not only did she help to organize a new office space, she also participated in the LSAMP program development, using her creativity to suggest highly engaging student activities and create outstanding flyers for our various events. She had a wonderful way to interact with other LSAMP students and was a friendly face at the front desk. Even while focusing on her research and schoolwork, she made time to serve as a peer mentor, sharing her experiences with students new to Cal State LA and LSAMP. Despite facing many challenges at home, Alexcia brought her positive energy and creative ideas to strengthen LSAMP and was consistently a forward-looking, engaged student leader. Alexcia is a role model for other students in her academic achievements as well as her service towards her fellow students.

OUTSTANDING ALUMNUS & MENTOR

JOSEPH LUCEY-RENTARIA, PH.D. · CIVIL ENGINEERING

Dr. Joseph Lucey-Renteria is an LSAMP alumnus who majored in civil engineering in 2018 and subsequently earned both a M.S. degree (2020) and a Ph.D. (2023) in civil engineering with an emphasis in hydrology and water resources at UCLA. He then earned the Oak Ridge Institute for Science and Engineering (ORISE) Fellowship to conduct his postdoctoral research with the US Army Corps of Engineers before joining the Civil Engineering Department at his alma mater Cal State LA as a tenuredtrack faculty member in 2024. Dr. Lucey-Renteria has earned numerous awards, including the NSF Graduate Research Fellowship. Since becoming an assistant professor in civil engineering, Dr. Lucey-Renteria established his Coastal Hydrology Laboratory to conduct research investigating compound events and uncertainties and has taught several courses for civil engineering majors. He has mentored 10 undergraduates and one master's student in research and has energizing enthusiasm for giving back to LSAMP and Cal State LA's student body in general. For example, he served on a career panel for the LSAMP program and gave a research talk for his College's annual Research Week to share about his academic journey and his research on coastal hydrology.

OUTSTANDING ACADEMIC, RESEARCH IN STEM & SERVICE/LEADERSHIP

HECTOR GARDEA · ELECTRICAL ENGINEERING

Hector Gardea is an electrical engineering major who consistently earned Dean's List honors. He has been a committed, integral participant in LSAMP since he joined in spring 2024. As an LSAMP research scholar in summer 2024, Hector conducted research investigating the biomechanics of jellyfish to design efficient underwater propulsion. Hector worked diligently to help his research mentor establish methods and start this project in his research lab and presented his work at the summer research scholars symposium at the beginning of fall 2024, and continued research as an NSF-sponsored CREST research scholar. He presented his research at two research symposia and also placed 4th at a university student research presentation competition in spring 2025. In summer 2024, Hector was hired as an LSAMP student assistant, and since then he has devotedly worked to communicate and interface with LSAMP students, helped plan LSAMP activities and served as a helpful, knowledgeable resource. As an engaged student, Hector sought and participated in other programs and activities that enhanced his educational journey. He participated in the BOOST program through which he designed and delivered a solar-powered lighting system at a transitional home for victims of domestic violence, and then in his junior year became the president of the American Society of Mechanical Engineers student organization promoting STEM and LSAMP. Hector's plans after graduating in spring 2026 are to pursue his Ph.D. in electrical engineering.

OUTSTANDING ACADEMIC & RESEARCH IN STEM

EDGAR YAK-DE PADUA · MATHEMATICS

Edgar Yak-De Padua is a major in mathematics and single-subject credentials. He graduated in spring 2025 with a 3.95 GPA and summa cum laude. Early in his undergraduate career, Edgar began working with the College of Engineering, Computer Science, and Technology (ECST) as a facilitator for the Summer Transition to ECST Program (STEP) and as a peer mentor for the First Year Experience (FYrE) Program where he supported students with pre-calculus and calculus. Edgar has also been an enthusiastic LSAMP participant since January 2024, quickly immersing himself in research. At Cal State LA, he worked with Dr. Michael Krebs on the Chromatic Number of 6-valent Circulant Graphs as an LSAMP Research Scholar. He also participated in an REU at Fairfield University, where he worked with Dr. Zhanar Berikkyzy on research in Anti-Ramsey Theory. Edgar presented his research at the Mathematical Association of America (MAA) MathFest in Indianapolis, where he received an Outstanding Student Poster Award. In November 2024, he was also awarded the Great Minds in Stem (GMiS) 2024 Scholarship, sponsored by Edison International, and invited to attend the 36th Annual GMiS Conference in Fort Worth, TX. Recently, he was awarded the Spring 2025 Edison STEM-NET Student Research Fellowship by the College of Natural and Social Sciences for his research with Dr. Michael Krebs. Edgar will continue his education with a master's program at Cal State LA. He hopes to pursue a Ph.D. and become a professor to support students and inspire others.

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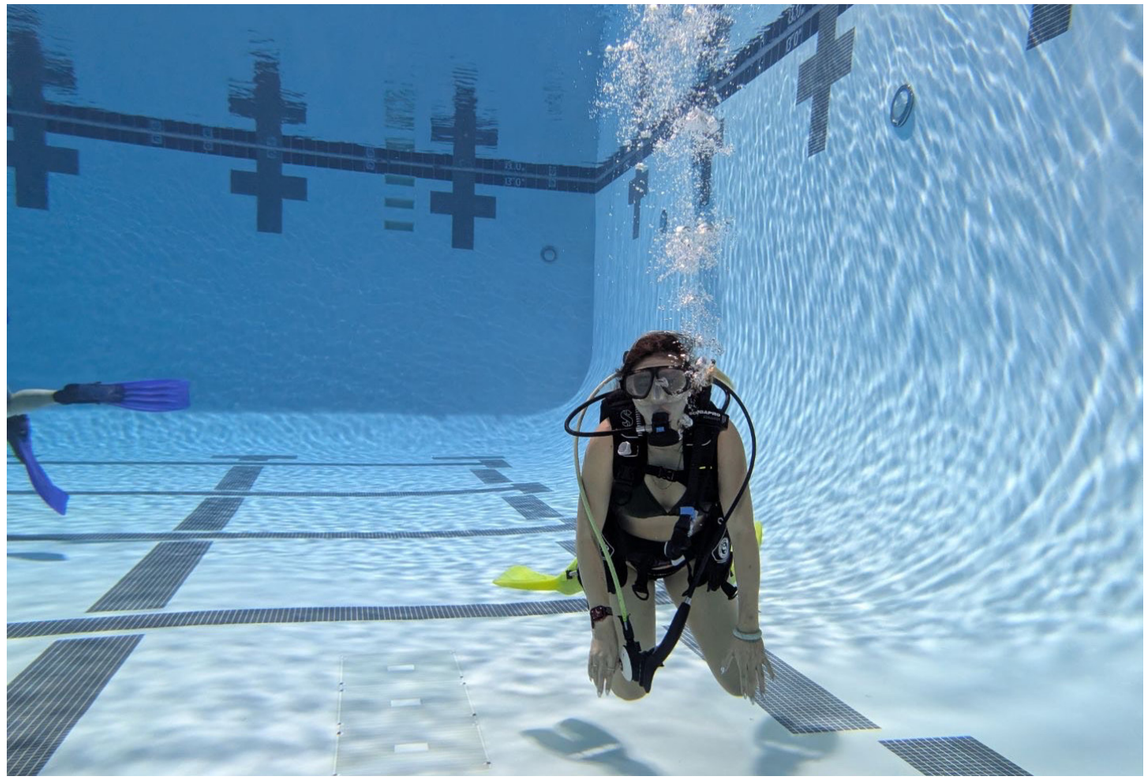
Cal Poly Maritime Academy

OUTSTANDING RESEARCH IN STEM & SERVICE/LEADERSHIP
ERICA PEI-TING TAM · OCEANOGRAPHY



Erika Pei-Ting Tam graduated from CSU Maritime Academy in December 2024 with a B.S. in oceanography. She transferred to Cal Maritime in August 2023, where she joined LSAMP her first semester on campus and quickly established herself as an excellent and caring mentor to all students, particularly to female students in STEM. Erika continued to be a dedicated and established mentor to the LSAMP mission throughout her upper-diivison studies. In addition to her LSAMP leaderhsip, she was part of the women's soccer team and served as a leader on and off the pitch. As a transfer student with a previous background in biology, Erika worked with Dr. Maryam Mohammadpour on undergraduate research projects, both curricular and also on summer research work to process oceanographic data and develop methods in Matlab programming for scripting raw data analysis. Erika was also a founding member of the campus SCUBA club, helping to initiate and grow the program that has successfully certified over 200 students, and counting, in various levels of SCUBA certification. After graduat-ing, Erika seeks to further her study in oceanography in graduate work. She aspires to one day represent her country as an officer in the United States Coast Guard.

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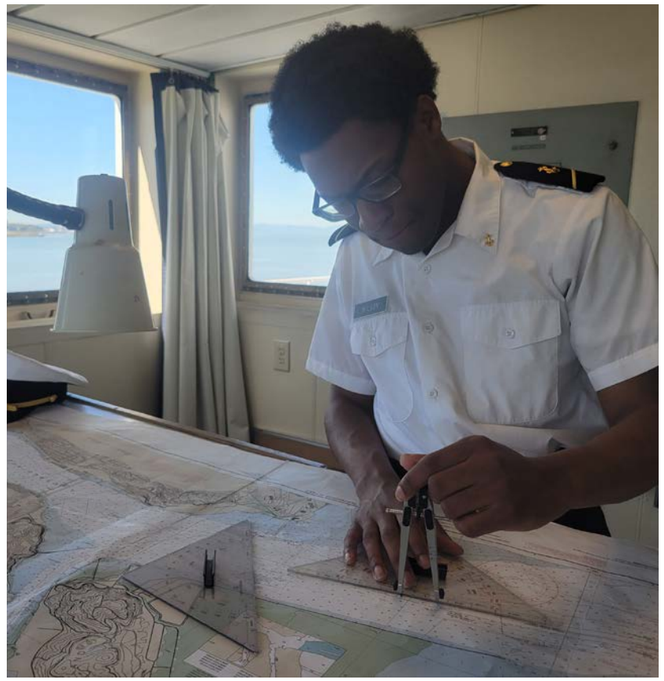
OUTSTANDING ALUMNUS
BENJAMIN CLARK · MECHANICAL ENGINEERING

Benjamin Clark graduated from CSU Maritime Academy in May 2023 with a B.S. in mechanical engineering and a minor in mathematics. Ben was a member of LSAMP since 2022. Ben has served his campus as a tutor and mentor to many of the undergrad students while maintaining a 3.7 major GPA. For his senior capstone project, Ben and his team were successful in making a sailboat autonomous and were able to design and build a secondary hull. Since graduating, Ben started a career in the nuclear industry working for the Idaho National Laboratory as a reactor project engineer. Ben works on the disassembly and decommissioning of advanced reactor experiments putting his knowledge of robotics and remote equipment to use. His development of technology validation test plans for advanced reactor removal techniques have been published at the Waste Management Symposia. Ben's future goals are to obtain his Professional Engineering License and pursue a graduate degree in physics.

OUTSTANDING RESEARCH IN STEM & SERVICE & LEADERSHIP
SHACAMEON WILSON · MARINE TRANSPORTATION



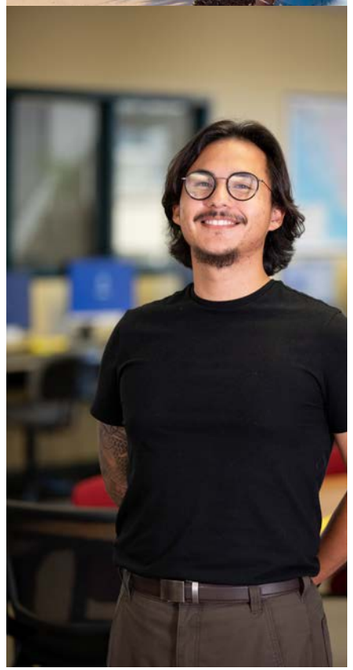
ShaCameon Wilson graduated in marine transportation from CSU Maritime Academy in May 2025. A four-year LSAMP student, he was always engaging and welcoming to all LSAMP students and helped mentor and support many in the program. ShaCameon was selected as the Cadet 2nd mate for the Training Ship Golden Bear, putting him in the cadet leadership with responsibilities for planning out the voyage and charting the course for the summer cruise with ports including San Diego, Kauai, Guam, Saipan, and Seattle before returning to Vallejo. ShaCameon also conducted undergraduate research with Dr. Elizabeth McNie, helping to process data and uncover trends in her research. After graduation, he plans to work as a third mate/officer on cruise ships, and to pursue further studies in his main passions in life: ships and physics. ShaCameon is fulfilling one dream through becoming a third mate but has one more to go in that he wants to earn graduate degrees in astrophysics. He often shares his appreciation of the LSAMP program for helping him through his degree and providing a sense of community.

California State University
MONTEREY BAY
Extraordinary Opportunity

OUTSTANDING RESEARCH IN STEM
JASMIN JUAREZ-GONZALEZ · MARINE SCIENCE

Jasmin Juarez-Gonzalez was a marine science major at CSU Monterey Bay who immersed herself in research and academics . In 2022, she was accepted into the LSAMP program and, shortly after, into the Ronald E. McNair Scholars Program. While at CSU Monterey Bay, she conducted research in the Environmental Physiology lab on ocean acidification and hypoxia effects on rockfish. In 2023, she participated in the Monterey Bay Aquarium Research Institute Summer Internship program, where she researched the effects of climate change on the survivorship and development of red abalone larvae. The following summer, she participated in CSU Monterey Bay's Ocean Science REU program, studying ventilation rates in female gopher rockfish under climate change conditions. In addition to research, she also served as an academic intern for the University of California Santa Cruz's GEAR UP program, where she assisted high school students with college and career readiness. As a Mexican-American and first-generation college student, Jasmin aims to be a role model for her community and inspire others through her journey in research and academia. She continues developing her skills and passion for STEM by pursuing an M.S. degree in environmental science at CSU Monterey Bay, with the mission to support synergistic scientists to conserve ecosystems.

OUTSTANDING RESEARCH INH STEM
OSCAR MURILLO-ESPINOZA · MATHEMATICS



Oscar Murillo-Espinoza graduated with his B.S. in mathematics and minor in computer science. After transferring from Cabrillo Community College, Oscar was accepted into the Ronald E. McNair Scholars Program and LSAMP to develop his research identity. For his first research experience, he participated in the Occidental College Oxy Math REU where he helped develop a method of counting arithmetical structures on canoe paddle graphs. The following summer, Oscar participated in the Baruch College Discrete Math REU working to improve the best-known bounds on the number of plane graphs that can be embedded on a set of points in the plane. His love for these subjects come from its abstract nature and requirement to think deeply about problems. His research touches different areas in math, yet they are all united by the study of graph theory. In addition to his research, Oscar has won various presentation awards at the SACNAS NDiSTEM conference (2023 & 2024), 2024 Joint Mathematics Meeting, and honorable mention at the 38th Annual CSU Student Research Competition. In 2024, Oscar was named a Barry Goldwater Scholar, a prestigious national undergraduate award for STEM. In addition to research, Oscar served as a UROC writing fellow where he facilitated weekly group meetings with current UROC students to develop their writing fluency and prepare for research opportunities. Oscar was awarded the Ramanujan-Hardy fellowship at Oregon State University, where he is pursuing his Ph.D. in mathematics.

OUTSTANDING RESEARCH IN STEM
ANNIE HANSEN · MARINE SCIENCE

Annie Hansen is a marine science major and computer science minor at CSU Monterey Bay. In the summer of 2022, Annie became an LSAMP participant and joined a UROC Researcher and Scholar where they studied the physical dynamics of coastal systems. At CSU Monterey Bay, they innovated current technologies to support marine restoration and conservation efforts, and are deeply invested in the ethics and accessibility of science. As an undergraduate researcher, Annie worked in the Biological Oceanography lab translating a radiative transfer model of photosynthetic submerged canopies –GrassLight– from Fortran to Python. In the summer of 2023, they attended Oregon State University's College of Earth, Ocean, and Atmospheric (CEOAS) REU, where they worked to map the influence of wave driven surface mixing on the Arctic Ice Sheet. They have disseminated their research over 10 different conferences, along with 2 technical reports. Annie was also involved in on-campus outreach programs, including the CSU Monterey Bay Basic Needs Department and the UROC Peer Writing Fellows. In 2024, Annie was named a Barry Goldwater Scholar, a prestigious national undergraduate award for science, technology, engineering, and mathematics, and in 2025 was named an National Science Foundation Graduate Research Fellowship Honorable Mention awardee. Annie graduated in spring 2025 as *magna cum laude* and seeks to become a professor in oceanographic research, striving to continue increasing the accessibility of instrumentation used in coastal and estuarine management.

OUTSTANDING RESEARCH IN STEM & SERVICE/LEADERSHIP
ALYSSA WALKER · MARINE SCIENCE

Alyssa Walter graduated with her B.S. in marine science and a statistics minor from CSU Monterey Bay in May 2025. Since joining the UROC and LSAMP, she participated in research projects in the Moss Landing Marine Laboratories Aquaculture Facility, Coastal Ecology Lab, and the Ocean Predator Ecology Lab where she led the Project Shark Scar, an undergraduatedriven initiative to study insights into shark life histories, reproduction, behavior, and anthropogenic threats. Also, as a NOAA Hollings Scholar, she interned with the Channel Islands National Marine Sanctuary where she analyzed elasmobranch movement with satellite telemetry and contributed to science communication efforts. During her time as an undergraduate researcher, Alyssa was fortunate to receive support through programs such as LSAMP, NOAA Hollings, CSU COAST, PALilSaDS, and the Sally Casanova California Pre-Doctoral Scholarship. Aside from research, Alyssa developed a shark education outreach program to foster conservation awareness among students and residents in Monterey County. Alyssa served as the Associated Students (AS) College of Science Senator, Chair of the AS Committee of Colleges, and sat on multiple committees shaping the future of CSU Monterey Bay's infrastructure and leadership. She was also a four-year member of the Otter Dance Team, and loved to represent CSU Monterey Bay at national collegiate dance competitions. Alyssa intends to pursue a Ph.D. program where she can continue studying the movement ecology and reproductive behaviors of marine top predators.

Campus Coordinators:

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California State University Northridge

OUTSTANDING RESEARCH IN STEM & SERVICE/LEADERSHIP
MATTHEW SMITH · COMPUTER SCIENCE

Matthew Smith graduated *cum laude* with a B.S. in computer science and a minor in mathematics from CSU Northridge in May 2024. In Summer 2023, he participated as an intern in an NSF REU at CSUN to develop energy efficient workload distribution algorithms for data centers. He expanded this work as a research assistant throughout the next year and as an LSAMP researcher the following summer. In 2024, Matthew served as a research fellow at the NASAsponsored Autonomy Research Center for STEAMH (ARCS) and led 25 students to build the Boracle system to standardize health data from smart wearable devices. He also contributed to the Proteus project for JPL robotics. Matthew had published 4 papers in IEEE international conferences and workshop (IEEE ICMLA 2023, CCNC 2024, CHASE 2024, CCWC 2025) and received NSF REU Travel Grant and CSUN STAR travel award. He had also presented in HICSS 2024 conference, JPL, SoCal 2023 REU Symposium, and two data science workshops. As a student researcher, he was selected to participate in the OSG School 2024. He had mentored 13 undergraduate students and two high school students in scientific computing research, machine learning, and software development. He served as a peer mentor for the SfS2 program at CSU Northridge to mentor 8 new transfer students since 2024. Matthew is currently pursuing an M.S. in computer science at CSU Northridge, and continues to contribute to the research community.

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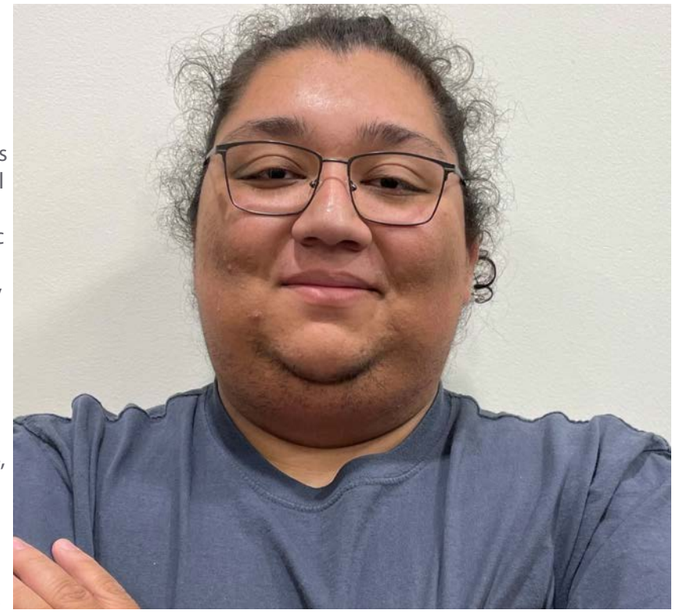
OUTSTANDING RESEARCH IN STEM
IAN SHERRILL · MECHANICAL ENGINEERING

Ian Sherrill earned his B.S. degree in mechanical engineering from CSU Northridge in 2024. During the 2023-24 academic year, he was part of the Smart Prosthetics research-based senior design project, under supervision of Dr. Peter Bishay. His cohort designed two new 3D-printed transradial prosthetic arms, named "Persistence" and "Precision" with wrist actuation capability, haptic feedback system, and a foot controller. He acted as a sub-team leader and contributed significantly to the success of the team in various competitions. He is a co-author of a published paper presenting the innovative designs of the research team. He is a recipient of a 2024 SoCalGas STEM-NET Student Research Fellowship award. He is also a research assistant in a three-year NSF-funded multidisciplinary project; and the current lab assistant in the Multiscale Mechanical Characterization Laboratory (MMCL). In summer 2024, Ian became an LSAMP Summer Research Fellow, working with Dr. Bishay to characterize the effective material properties of 3D-printed structures and implement them in the generative design process. He is expected to earn his M.S. degree in mechanical engineering by May 2026.

OUTSTANDING RESEARCH IN STEM & SERVICE/LEADERSHIP
GERBERT FUNES ALFARO · MECHANICAL ENGINEERING

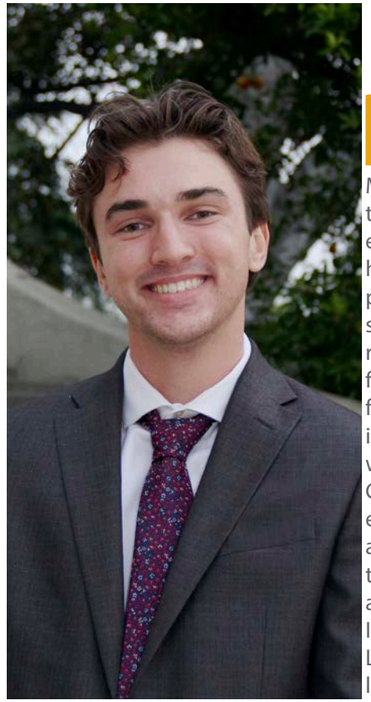
Gerbert Funes Alfaro earned his B.S. degree in mechanical engineering from CSU Northridge in 2024. During the 2023-24 academic year, he was part of the Smart Prosthetics research-based senior design project. Under supervision of Dr. Peter Bishay, his cohort designed two new 3D-printed transradial prosthetic arms, named "Persistence" and "Precision" with wrist actuation capability, haptic feedback system, and a foot controller. His role as the project manager contributed significantly to the success of the team at various competitions. Gerbert is a recipient of the CSUN-M3X fellowship, is the project manager in a three-year NSF-funded multidisciplinary project at CSU Northridge, and is a co-author in three published journal papers. In summer 2024, Gerbert became an LSAMP Summer Research Fellow, working with Dr. Bishay to enhance the foot controller technology used for controlling prosthetic arms. He is expected to earn his M.S. degree in mechanical engineering by May 2026.



CAL POLY POMONA

OUTSTANDING ACADEMIC & RESEARCH IN STEM
MINA THORESEN · PHYSICS

Mina Thoresen graduated with a bachelors degree in physics with high honors from Cal Poly Pomona in spring 2025. During her time in college, she performed observational astronomy research with Professor Breanna Binder in the Department of Physics & Astronomy through the LSAMP program. Her first project involved studying X-ray binaries in nearby galaxies. She then participated in the Summer Undergraduate Research Fellowship (SURF) program at NASA-JPL and did research on star formation in the Galactic center with Dr. Paul Goldsmith and Dr. H Perry Hatchfiel. She continued this work at Cal Poly Pomona and has submitted her work for publication in the Astrophysical Journal. In summer 2024, she performed research at Caltech studying galaxy clusters with Dr. Jack Sayers in their WAVE program. Mina has presented work from all three of these projects at the 244th and 245th meetings of the American Astronomical Society, the first S-STEM Scholars Meeting in Washington DC, and the CSU Student Research Competition. She also received the Vincent and Jesse Parker Scholarship for her achievement in physics two years in a row. She has been an active member of the Society of Physics Students and restarted the Women and Gender Minorities in Physics, helping build community and uplift underrepresented voices in STEM.



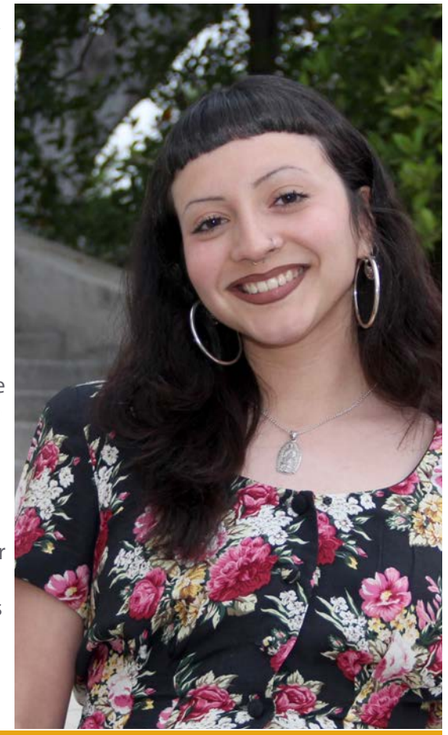
OUTSTANDING ACADEMIC & RESEARCH IN STEM
PHILIP NICOLL · APPLIED MATHEMATICS

Philip Nicoll is an applied mathematics major at Cal Poly Pomona and a recipient of the CSU Trustees Award, the Edison International Scholarship, the Society for Industrial and Applied Mathematics (SIAM) award, and the Mr. and Mrs. Keith Soon Kim award. He began as a mechanical engineering major, contributing as a design engineer on two Cal Poly Rose Floats. This experience ignited a passion for creative problem solving and hands-on work, ultimately leading him to realize his deeper interest in mathematics. He is a member of the LSAMP program and an NSF SPIRES-funded scholar. Driven by curiosity, he taught himself programming and deep learning, which opened the door to interdisciplinary research at the intersection of machine learning, mathematics, and physics. His first research experience at Bronco Space explored machine learning models for spectral conversion of wildfire data, an experience that sparked his interest in solving open-ended, high-impact problems. Currently, he conducts research with Dr. Hao Ji, applying machine learning to accelerate the "Preconditioned Conjugate Gradient Method," a critical algorithm in physics simulations. His work explores data driven transformations that outperform traditional heuristics, with applications in scientific computing and simulation. Philip is deeply involved in the scientific community, attending AMS, MAA, and AGU conferences, as well as SIAM and CPP mathematics colloquia. As a member of SIAM and the Student Innovation Idea Labs, he values collaboration and interdisciplinary thinking. Looking ahead, he hopes to apply his background in mathematics and machine learning to develop impactful solutions in physics and health care.

OUTSTANDING ACADEMIC & RESEARCH IN STEM
SHAWN CHEN · COMPUTER ENGINEERING

Shawn Chen is a computer engineering major, obtaining a physics minor at Cal Poly Pomona. Since entering college, technical innovation and guiding others through leadership have been his priorities, earning him multiple research fellowships and scholarships. During his first experience in autonomous vehicles, as a lead on the Banshee UAV project, he worked on a battery hot-swapping ground system for unmanned aerial vehicles, which successfully resulted as a proof of concept. From this, two peer-reviewed IEEE papers were successfully published. Despite facing financial problems at home, his commitment to research made him the youngest person to earn the US DOT Federal Highway Administration Dwight David Eisenhower Transportation Fellowship in the 2023-24 school year. After his sophomore year, he diverted into fiber optics research, focusing on singlemode- multimode-single-mode sensors that could sense temperature and strain at a fraction of the cost, size, and power consumption compared to traditional sensors. This research led to two publications under review by Optica. In addition to his research experience, Shawn was active in various campus communities, such as being a trumpet player in the symphonic winds band and a member of the Tau Beta Pi engineering honor society. Overall, the combination of research, leadership, community involvement, academics, and character uniquely put him in a position of excellence and achievement.

OUTSTANDING ACADEMIC & RESEARCH IN STEM
SOPHIA ANABEL RAMIREZ · BIOLOGICAL SCIENCES



Sophia Anabel Ramirez graduated with a bachelor's in biological sciences and a minor in English from Cal Poly Pomona in spring 2025. Sophia is a proud first-generation Mexican-American student from an immigrant family and is passionate about making nature and science more accessible. Various experiences deepened her interest in the environmental and social justice field , beginning in summer 2022 through the NASA Science Activation Student Airborne program where she researched the Urban Heat Island Effect in Los Angeles. In summer 2023, Sophia became a Doris Duke Conservation Scholar at UC Santa Cruz and went on to intern with the Critical Ecology Lab (CEL) in the summer of 2024. With CEL, Sophia worked with Dr. Suzanne Pierre on the Ecological Scars of Plantation Slavery on the island of St. Croix to analyze how sugar cane cultivation has impacted the soil and regrowth of the forests. During 2024-25, as a LSAMP scholar, Sophia conducted research with Dr. Janel Ortiz analyzing environmental variables such as air quality and lead pollution in soil of green spaces across the eastern San Gabriel Valley. In spring 2025, Sophia became an early career fellow at the Center for Diverse Leadership in Science at UCLA. Sophia was a SEES mentor to freshmen from 2022-2025 and served on the board for Hermanas Unidas at CPP. Sophia will continue to relentlessly work to build a more just and sustainable future for all and plans to continue her education in graduate school in the future.

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SACRAMENTO STATE

OUTSTANDING RESEARCH IN STEM
BROOKE MILAN · BIOCHEMISTRY & BIOLOGICAL SCIENCES

Brooke Milam completed her B.S. as a double major in biochemistry and biological sciences with a biomedical concentration in May 2025. During her time, she worked on the synthesis of broad-spectrum therapeutics for the treatment and prevention of virus infections from HIV and SARS-CoV-2. Brooke demonstrated her excellence in research work and presentation skills. In every semester but her first, she was awarded funding to for her research, including Sacramento State's Summer Undergraduate Research Experience award, IRA Program, RISE and U-RISE programs, and CSU Biotechs's Howell Scholar Program. She was a CSU Biotech Nagel award finalist (2024) and won an Outstanding Undergraduate Research Presentation award at 2024 SACNAS NDiSTEM.

OUTSTANDING RESEARCH IN STEM
TIRZAH COCHRAN · BIOLOGICAL SCIENCES

Tirzah Cochran, a first-generation student, transferred to Sacramento State as a biology major concentrating in evolution, ecology, and conservation in spring 2023. She obtained her Associate in Science from Folsom Lake College in fall 2022 and began volunteering in Dr. Jamie Kneitel's lab during her first semester at Sacramento State. Soon after, she began her own research on host-parasite relationships in vernal pool plant communities as an LSAMP scholar. She presented her research at the Merced Vernal Pool & Grasslands Reserve 10th Anniversary and Science Symposium, Ecological Society of America's 109th Annual Meeting, and Sacramento State's NSM Research Symposium. She is first author in a 2025 Flora publication on the endemic plant parasite (Cuscuta howelliana) and host (Eryngium castrense) in California vernal pools. She also worked as a summer Ecological Research Scholar at River Partners where she designed a project assessing coarse woody debris sampling methods in riparian zones. Her work will be used to estimate the risk of wildfires to Sacramento River Wildlife Areas managed by the California Department of Fish and Wildlife. She was active as a volunteer with the Bureau of Land Management at Pine Hill Preserve where she assisted in mapping threatened and endangered plant species, fire prevention, surveys, and seed collections. Tirzah graduated in May 2025 and works as an Environmental Services intern at the California Department of Fish and Wildlife.

OUTSTANDING ALUMNUS & CONTRIBUTION TO CSU-LSAMP @ SAC STATE
RICHARD AGUIRRE · BIOLOGICAL SCIENCES

Richard Aguirre, a first-generation college student, who embarked on his educational journey in 2001 at Sacramento State, majoring in biological sciences, where he became involved with LSAMP as an undergraduate student in 2004. His dedication and hard work culminated in graduating in 2010 with a B.A. in biological sciences. Since then, he has transitioned into a full-time staff position with Sacramento State's Science Educational Equity (SEE) Program, which he was a member of as an undergraduate, currently serving as the SEE Services Coordinator. His journey as a first-generation college student has shaped his career and commitment to SEE and the LSAMP programs. During his tenure at Sacramento State, he has worked and engaged with over 500 students, with about 250 being LSAMP students, most of whom have graduated and become scientists, educators, healthcare providers, and more. Richard has been instrumental in connecting students with resources, getting students paid for their research, working with students' research mentors, helping organize travel to conferences, and assisting the campus coordinators in organizing events. He has served as a bridge between the LSAMP Statewide office, the campus coordinators, students, faculty mentors, and the Sacramento State grants office. Richard says that LSAMP, SEE, and Sacramento State did so much for him as a student, his growth as a person, and in completing his degree. He continues to pay that forward by helping students achieve their goals and make a difference in their communities, as these programs have done for him.

OUTSTANDING ACADEMIC & RESEARCH IN STEM
ISAIAS INIGUEZ-SANDOVAL · BIOCHEMISTRY

Isaias Iniguez-Sandoval graduated with a B.S. in biochemistry with honors in May 2025. As an undergraduate, he worked with Dr. Linda Roberts investigating apolipoproteins in high-density lipoprotein ("good cholesterol") and their propensity to form amyloid, a deleterious, insoluble protein aggregate that is associated with cardiovascular disease. He presented (and co-presented) six posters and two talks at local, state-wide, and national conferences whose topics ranged from protein purification to biophysical characterization. In the summer of 2024, Isaias was granted the opportunity to work alongside researchers in Dr. Jeffery Kelly's lab at the Scripps Research Institute where he was instrumental in creating, testing, and optimizing assays to easily characterize different chemicals as autophagy activators or inhibitors. Supported by his mentors and federal programs, like LSAMP and NIH-URISE, Isaias found his passion for science and continues doing research at UC Davis' Chemistry and Chemical Biology Ph.D. program studying protein biophysical chemistry.

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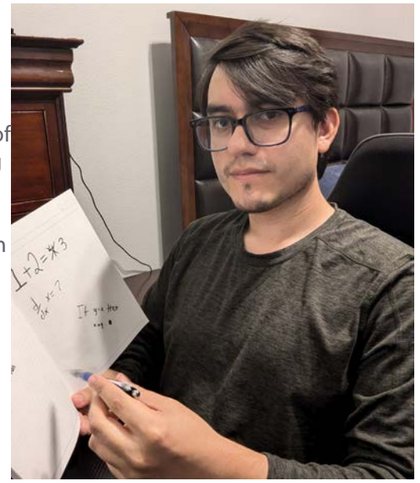
CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

OUTSTANDING ACADEMIC, RESEARCH IN STEM & SERVICE/LEADERSHIP
ANGEL GUTIERREZ · MATHEMATICS



Angel Gutierrez graduated from CSU San Bernardino in spring 2025 with a B.S. in mathematics with an applied mathematics concentration with Department Honors. During his undergraduate years, Angel contributed to research in knot theory with Dr. Rolland Trapp and gave two different talks on Prime Crushtaceans: "Prime Crushtaceans of Fully Augmented Links up to Six Crossings" and a follow-up talk expanding this work to include original results that Angel obtained with his research group using applications of Group Theory. Angel and his research group plan to submit a publication of their findings to an undergraduate research journal. In spring 2024, Angel was a learning assistant in statistics with applications, where he helped students with the material as well as constructed an R-Studio guide for them. He later worked for the ASUA Tutoring Center as a regular tutor and an embedded tutor. Angel's strong academic work placed him on the Dean's List for multiple semesters, including fall 2023, in which he received the Dean's Letter of Recognition. Angel plans to pursue graduate study in mathematics so as to obtain a Ph.D. and eventually become a university professor.

OUTSTANDING RESEARCH IN STEM
KATHERINE FRANCO · CHEMISTRY

Katherine Franco graduated from CSU San Bernardino in spring 2025 with a B.S. in chemistry. Her passion for inorganic chemistry emerged during coursework in materials chemistry, where she discovered her fascination or crystallography and structure-property relationships in novel materials. Under the mentorship of Dr. Joyce Pham, Katherine conducted research in a solid-state inorganic chemistry lab, synthesizing and characterizing halide hybrid materials. Her research aimed to provide a deeper understanding of crystal structures, contributing valuable insights for the rational design of advanced inorganic materials. In summer 2024, she expanded her expertise through the Leadership Alliance Summer Research Early Identification Program (SR-EIP) at Princeton University in Dr. Robert Cava's lab, investigating organic-inorganic hybrid materials. Katherine presented her research at multiple conferences, including the Leadership Alliance National Symposium (LANS), Southern California Conferences for Undergraduate Research (SCCUR), , and and the American Chemical Society (ACS) Spring 2025. She also prepared a manuscript for publication based on her finding. Katherine continues her academic journey in the Ph.D. program in Chemistry at the University of California, Riverside, focusing on inorganic and materials chemistry. Her long-term goal is to pursue a research-driven career, developing transformative materials to address critical energy and sustainability challenges. As a first-generation Latina scientist, Katherine is committed to inspiring and paving the way for underrepresented students pursuing careers in STEM.

OUTSTANDING ACADEMIC
PRISCILLA VASKEZ · BIOINFORMATICS

Priscilla Vaskez graduated in May 2025 with a bachelor's degree in bioinformatics from CSU San Bernardino. Beginning in November 2023, she conducted research in Dr. Joseph Heras' lab, where she explored bioinformatics and comparative genomics. Her project focused on assembling the genome of Xiphister mucosus, an herbivorous marine fish, to investigate the evolution of dietary strategies within prickleback fishes (family Stichaeidae). Utilizing advanced computational tools, she successfully generated and analyzed a genome assembly to support this research. Priscilla's commitment to scientific inquiry is evident in her use of computational methods to address complex biological questions—work she has shared through presentations at several major conferences. Over the 2024–25 academic year, she presented her research at the Western Society of Naturalists (WSN) conference in Portland, Oregon; the Meeting of the Minds symposium at CSU San Bernardino; and the Southern California Academy of Sciences (SCAS) conference at the University of California, Irvine. Alongside her academic and research pursuits, Priscilla balanced work responsibilities, holding positions as a bank teller at Chase Bank and as a student assistant at CSU San Bernardino's Center for Cyber and AI. She continues her academic journey as a graduate student in the Molecular Science and Software Engineering program at the University of California, Berkeley, where she plans to further her focus on computational approaches in science.

OUTSTANDING RESEARCH IN STEM
VANESSA CASTRO · BIOLOGY

Vanessa Castro graduated from CSU San Bernardino, with a B.S. in biology in fall 2024. Since fall 2023, she has conducted research in Dr. Joseph Heras' lab, where she demonstrated strong dedication to her project, which focused on identifying microplastics in the guts of marine rockfishes from the genus *Sebastes*. She was awarded a CSU Council on Ocean Affair, Science & Technology (COAST) grant to support this work. In November 2024, Vanessa attended SACNAS NDiSTEM in Phoenix, Arizona, where she engaged in networking with peers and professionals, participated in workshops on diversity in STEM, and gained valuable insight into research initiatives that support underrepresented communities in science. The following week, she presented a poster on her microplastics research at the Western Society of Naturalists meeting in Portland, Oregon. In addition, Vanessa conducted research through the Minorities in Shark Science (MISS) program, which involved stable isotope analysis of moon jellies. She presented this research at the Society for Integrative and Comparative Biology (SICB) conference in Atlanta, Georgia, in January 2025. She also interned with Environment for th

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SDSU | San Diego State University

OUTSTANDING ALUMNA
AMANDA BRAMBILA · BIOCHEMISTRY

Amanda, a first-generation college student from Tijuana, attended Southwestern Community College before transferring to SDSU in fall 2012. She earned her B.S. in biochemistry in May 2015. While at SDSU, Amanda conducted research through IMSD and LSAMP in the labs of Dr. Paul Paolini and Dr. Tom Huxford. Amanda received several awards, including the Doris A. Howell CSUPERB Research Award and the Conrad Prebys scholarship. Amanda was also involved in the ICAN mentoring program, various campus organizations, and she participated annually at the San Diego Science Festival, 2011 to 2015, serving as ambassador for SDSU in 2015. Amanda's connection with SDSU persisted beyond her graduation, haven kept in touch with mentors and participated multiple times in the annual Current/Post Ph.D. panels hosted by various CASA programs. During graduate school, Amanda engaged in community outreach and mentoring through the office of STEM Diversity, SACNAS UCSC chapter, and DEI committees. Amanda advocated for opportunities for low- income high school students near UCSC, mentored undergraduates, and led the UCSC SACNAS Chapter to win accolades including Chapter of the Year and Chancellor for Diversity Award. After earning her Ph.D., Amanda became an IRACDA Postdoctoral Fellow at UCSD. Back in San Diego, she connected with her SDSU mentors to give back. She judged at the Student Research Symposium in 2022 and 2023, joined panels on imposter syndrome and and resilience in STEM in 2023. Amanda now has a Postdoctoral position at Eli Lilly.

OUTSTANDING ACADEMIC
ANGELINA MOM · COMPUTER SCIENCE

Angelina Mom graduated *summa cum laude* with a B.S. degree in computer science with a minor in mathematics from SDSU. She has been a part of the LSAMP program since 2021, where she participated in the 5-week pre-calculus course to prepare her for her academic journey. Angelina maintained her outstanding GPA by taking advantage of supplemental instruction and office hours to deepen her understanding of challenging concepts and ensure her academic success. Angelina also participated in the MESA program, where she had the opportunity to participate in their summer research academy. During the summer of 2023, Angelina conducted research with Dr. John Kang in the Smart Manufacturing and Metrology Lab focused on "Using Feature-Based and Convolutional Neural Network Based Pore Detection Methods for Cross-Section Images of 3D Printed Parts," and analyzed different methods for pore detection to find the best performing method. Outside of academics, Angelina worked at SDSU's IT help desk in the College of Engineering, where she assisted faculty and staff with their technical needs.

OUTSTANDING ACADEMIC & RESEARCH IN STEM
ELLA HORVATH · ENVIRONMENTAL SCIENCES

Ella Horvath graduated *summa cum laude* from SDSU with a B.S. in environmental sciences as the Outstanding Graduate in the Department of Earth and Environmental Sciences. Ella participated in LSAMP since her junior year, receiving research stipends that enabled her to devote significant time to her research and studies. Ella has excelled academically while pursuing hands-on research, maintaining an almost perfect GPA. Ella first conducted research in the lab of Dr. Rebecca Lewison in Conservation Ecology Lab and analyzed over 1,000 hours of remote camera data to help monitor endangered Sonoran Pronghorn populations. Later, Ella joined Dr. Rulon Clark's Behavioral Ecology Lab and worked as a field technician studying rattlesnake behavior through biologging and radio telemetry. Motivated by this work, Ella designed and led her own novel microhabitat selection study on the threatened Red Diamond Rattlesnake (Crotalus ruber). Ella presented her research at SDSU's Student Research Symposium, which earned the President's Award, advancing to the CSU-wide research competition at Humboldt State. Ella's accomplishments reflect her lifelong passion and dedication to environmental conservation amid climate change and human impact. Ella has exemplified the mission of LSAMP through her academic excellence and research. The program's support was fundamental in allowing her to focus on her research, and she looks forward to continuing her work in conservation ecology and biology.

OUTSTANDING RESILIENCE & DEDICATION
YULIANNA (YULI) IZAGUIRRE · COMPUTER SCIENCE

Yulianna (Yuli) Izaguirre, graduated with a B.S. in computer science from SDSU. During her first semester, Yuli underestimated the commitment required for academic success and found herself on academic probation.. Determined to improve, Yuli refocused the following semester and steadily raised her grades. When COVID-19 struck, like many students, Yuli questioned her future in STEM, but her family's support kept her on track, and upon returning to campus, she embraced new opportunities and stayed committed to her studies. Seeking a strong support network and career exploration, Yuli joined academic organizations, a summer research program, hackathons, and academic clubs, collaborating with peers in engineering and computer science. Through these experiences, she discovered a passion for robotics, which led her to join the Mechatronics Club. There, she went on to lead software, robotics, and computer vision projects—efforts that helped her team reach the RoboSub 2023 semi-final . Through consistent dedication, Yuli elevated her GPA to 3.38 and secured a DevOps Software Engineer internship at LPL Financial, where she developed a Python script to streamline security metrics, ultimately earning a full-time job offer upon graduation. Despite academic struggles and pandemic challenges, Yuli's resolve underscored her determination not only to persevere in higher education but also to stay in the field and foster representation for underrepresented students.

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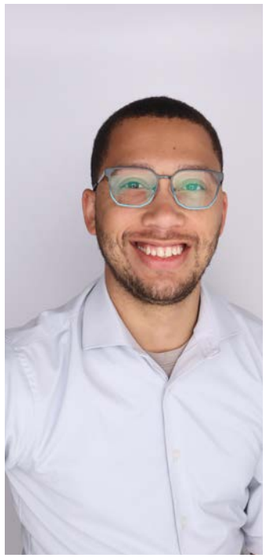
San Francisco State University

Outstanding Academic , Research in STEM & Service/Leadership

Keith Curry · Computer Science & Biology



Keith Curry is a double major in computer science and general biology at San Francisco State University, maintaining a 3.77 GPA. In the Esquerra Lab, Keith repurposes 3D printers into low-cost microscopes for high-throughput biological experimentation. He leverages Raspberry Pi, Python programming, and 3D printing, to design and prototype custom imaging solutions that improve accessibility and accelerate research workflows. Outside the lab, Keith serves as the Outreach Chair for the Association for Computing Machinery, where he collaborates with leading industry partners to host workshops, career fairs, and networking events. He also led the fundraising team for SF Hacks, helping organize a 48-hour hackathon that brought together nearly 300 hackers from over 40 schools, six states, and two countries. Building on the technical skills gained in the lab, Keith founded the 3D Printing and Design Club, creating new opportunities for students to explore fabrication and design through hands-on projects. Recognizing the need for resources, he takes initiative to ensure future students have enhanced opportunities for learning and growth. Keith's commitment to expanding access to STEM has been recognized with multiple awards, including the LSAMP award, the U-RISE Fellowship, the Vincent Constantino Scholarship, the Bengier Foundation University Scholarship, and the Genentech Foundation Scholars Program fellowship. In summer 2025, he joined Fastly as a Software Engineering intern. He envisions his future career at the intersection of industry and research, where he looks forward to creating tools and systems that advance science and expand access to research opportunities.

Outstanding Academic, Research in STEM & Service/Leadership

Benjamin Lee · Biological Science

Benjamin Lee earned a B.S. in cell and molecular biology with a minor in computing applications from San Francisco State University in 2025. His research journey began through the Genentech Foundation Summer Directed Research program, which sparked his interest in developmental biology. Afterward, he joined Dr. Kai Burrus's lab studying Wnt signaling, a specific family of signaling proteins involved in development and adult homeostasis. He researches how Wnts are transported from producing to receiving cells in chick embryos and cell culture. With the support as an LSAMP scholar, Benjamin has presented his findings at various regional and national conferences, including the American Society for Cell Biology conferences in 2023 and 2024, and has given an award-winning talk at the Bay Area Stanford Regenerative Medicine Conference. Beyond presenting, Benjamin has second-authored a publication and is working on a first-author manuscript on Wnt signaling. Benjamin's dedication to science and insatiable curiosity have earned him various distinctions and scholarships, including the 2025 National Science Foundation - Graduate Research Fellowship Program Honorable Mention, the California Institute for Regenerative Medicine COMPASS Fellowship, the Genentech Foundation Scholarship, the Genentech Promoting Inclusivity in Computing Scholarship, and the CSU Sally Casanova Pre-Doctoral Scholarship. Benjamin started his Ph.D. at Stanford University studying stem cell biology and regenerative medicine. He hopes to become a principal investigator striving to expand the field of science, mentor students, and create therapies to help others.

Outstanding Research in STEM & Service/Leadership

Chevron Jordan · Biochemistry

Chevon Jordan was a biochemistry major at San Francisco State University and an undergraduate researcher funded by the U-RISE and the Genentech Foundation Scholars programs. She is passionate about structural biology and biophysics, with a focus on understanding protein dynamics and developing tools to investigate complex biological pathways. Her research spans topics such as food fraud detection and the structural characterization of extremophilic globins using small-angle X-ray scattering (SAXS). Chevon's work has led to a firs -author publication and several conference presentations, including an award-winning presentation at ABRCMS. She also represented the Northern California delegation as a chaperone at the National Junior Science and Humanities Symposium (JSHS). Chevon has held research positions at Brookhaven National Laboratory, Chapman University, and SFSU, and has participated in mentorship programs through VIR Biotechnology and Caltech. Committed to increasing representation in STEM, Chevon has spoken on the Black Health Matters panel and a mental health advocacy panel for college students. She has also served as a student speaker at the SFSU Emeriti Luncheon and the opening of the new Science and Engineering Innovation Center (SEIC) and has been featured in promotional videos for Gilead Sciences and SmithGroup highlighting the impact of the new SEIC space on students. Her academic excellence, leadership, and perseverance have earned her numerous honors and scholarships. Chevon began her Ph.D. in molecular biophysics at Johns Hopkins University, where she plans to lead interdisciplinary research at the intersection of structural biology, bioinformatics, and biophysics.

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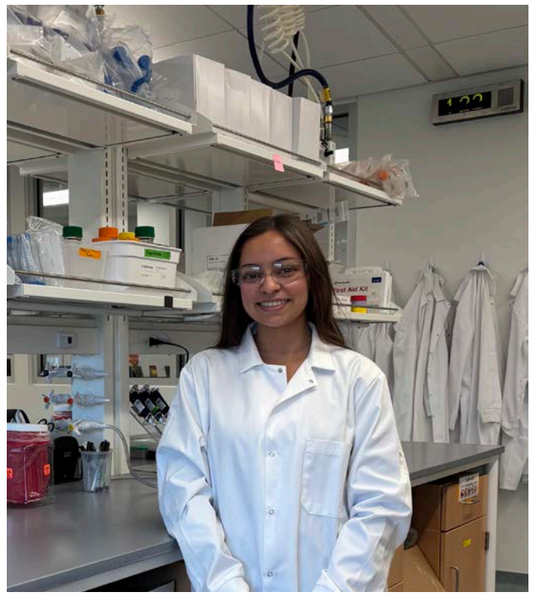
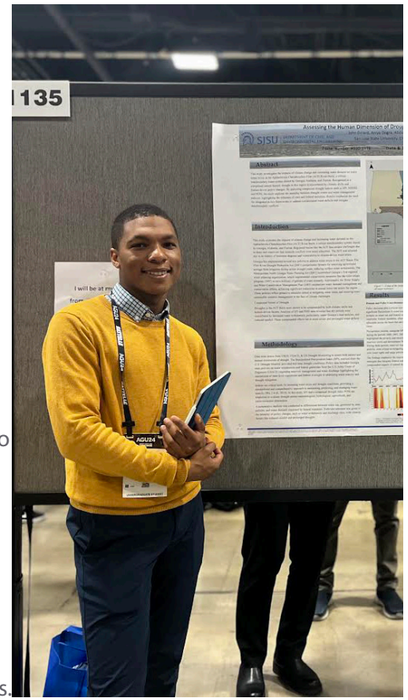
SJSU SAN JOSÉ STATE UNIVERSITY



OUTSTANDING ACADEMIC
STEPHANIE VIRGEN · CHEMISTRY

Stephanie Virgen Ordaz is a senior pursuing a B.S. degree in chemistry with a concentration in biochemistry at SJSU. She has steadily increased her cumulative GPA since her sophomore year, holding a 3.66 as of spring 2025; she has maintained a semester GPA of 3.5 or above for the majority of her academic career at SJSU. She began her undergraduate research in fall 2023 under Dr. Taylor Arhar as part of the Protein Biochemistry team studying the interaction between the *E. coli* molecular chaperones CbpA and DnaK through binding assays, such as Differential Scanning Fluorimetry (DSF). In summer 2024, she participated in an NSF REU at Western Washington University, under Dr. Jeanine Amacher, where she researched Sortase A and the potential substrate-membrane interactions that occur when Sortase A ligates substrate to the cell wall of gram-positive bacteria. Expected to graduate in Spring 2026, Stephanie hopes to attend graduate school where she will continue biochemistry research and become the first in her family to receive a graduate degree.

OUTSTANDING RESEARCH IN STEM
JOHN DILLARD · CIVIL ENGINEERING



John Dillard graduated from SJSU in December 2024 with a B.S. in civil engineering and is now employed at California Water Service. While at SJSU he led a research project under the advisement of Professor Ali Mehran, investigating the impacts of climate change and increasing water demand on water stress levels in the United States, with a focus on the Apalachicola-Chattahoochee-Flint (ACF) River Basin. His research analyzed drought indices, water management policies, and transboundary conflicts, contributing to a better understanding of how human activities and climate variability influence water scarcity. He presented his findings at the 2024 American Geophysical Union Conference in Washington, D.C. As a student John was an intern at Cal Water, contributing to water supply reliability projects by reviewing Urban Water Management Plans, Water Supply & Facility Master Plans, and Groundwater Sustainability Plans. He also managed a database for water supply commitments, assessed regulatory compliance in water production reporting, and supported consultant selection for water resource studies. Now, as a full-time employee, John supports California Water Service's mission of providing high-quality, affordable water and wastewater services. His role focuses on sustainable water management solutions, including drought resilience, water demand forecasting, and policy-driven water resource planning. He is dedicated to strengthening long-term water security and infrastructure resilience to ensure a sustainable and reliable water future for the communities he serves.

OUTSTANDING ACADEMIC & SERVICE/LEADERSHIP
ANDREW GOMEZ
CIVIL ENGINEERING

Andrew Gomez was a senior pursuing a B.S. degree in civil engineering at SDSU. Throughout his four years of study, he has demonstrated both academic excellence and leadership, maintaining a 3.5 GPA while actively engaging in the civil engineering community. His passion for the field led him to join Chi Epsilon, the nationally recognized Civil Engineering Honor Society, where he has taken on pivotal leadership roles as president in fall 2024 and vice president in spring 2025. Through these roles, Andrew cultivated a supportive and collaborative environment, mentoring fellow students through challenging coursework and fostering connections among members. His dedication to helping others and building a strong community within Chi Epsilon has not only strengthened his own skills but has also deepened his commitment to giving back to the field of civil engineering. Being part of Chi Epsilon has connected him with like-minded peers who share his passion and drive, pushing him to exceed his own expectations. Grateful for the invaluable experiences and relationships he has built, Andrew is eager to apply his technical knowledge and leadership experience in the professional world. Upon graduating in spring 2025, he planed to enter the workforce, focusing on designing and optimizing traffic routes in bustling urban environments, where he aims to make a lasting impact on infrastructure development and continue growing as a civil engineering professional.

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OUTSTANDING RESEARCH IN STEM & CSU-LSAMP AMBASSADOR
DIEGO ORTEGA · ENVIRONMENTAL EARTH & SOIL SCIENCES

Diego Ortega, an environmental earth and soil sciences major with a concentration in hydrology, a water science minor, and a videography and photography minor at Cal Poly in San Luis Obispo, has shown exceptional achievement in research, environmental fieldwork, and STEM leadership. A first-generation college student and immigrant from Mexico, Diego has actively pursued opportunities to blend science with service. Diego conducted a 12-week LSAMP research project titled "Global Sand Sample Characterization", analyzing 298 sand samples for physical and chemical properties and creating a GIS-based website to present his finding. He is currently expanding the project to build a permanent STEM teaching exhibit at the Warren J. Baker Center on-campus. His environmental experience includes serving as a Conservation and Trails intern for the Mendocino Land Trust, participating in endangered species mapping with the USFWS at Cal Poly, and working as a field biology intern at Althouse and Meade, an environmental consulting firm. In addition to research, Diego has used his multimedia skills to document science and community efforts, including filming a documentary on Cal Poly's Latinos in Agriculture program and filming conservation projects at Swanton Pacific Ranch. He also volunteers extensively, co-founding The Kindly Foundation, a nonprofit promoting kindness through community events. Diego has held leadership roles as DEI Chair for the CAFES Student Council, Social Media Chair for the Environmental Sciences Club, and Mustang Mentor for first-generation high school students.

OUTSTANDING RESEARCH IN STEM & SERVICE/LEADERSHIP
GIOVANNI DE LA LUZ · COMPUTER SCIENCE

Giovanni De La Luz is a third-year computer science major (senior standing) with a minor in bioinformatics at Cal Poly in San Luis Obispo. As a first-generation Mexican-American, born and raised in South Central Los Angeles, Giovanni's education has empowered him to uplift underrepresented communities in higher education. During his second year, Giovanni took on the role of an instructional student assistant for the Office of Writing and Learning, where he provided academic support to peers facing challenges in mathematics and computer science courses. A passionate advocate for diversity, Giovanni became a board member of the school's ColorStack chapter board, an organization focused on increasing the number of Black and Latinx graduates in computer science. Although he joined LSAMP during his first year, his research journey began the following year at USC's Biostatistics and Data Science Summer Training Program. That same summer, Giovanni served as an EOP summer learning assistant and aided in the transition of first-generation students into college life. From these experiences, he was admitted to the Cal-Bridge program, which will support his aspirations to pursue a Ph.D. in bioinformatics. Over the past year, he has supported the LSAMP program directly as a student assistant, with a focus on campus outreach. Giovanni has continued to conduct bioinformatics research at Cal Poly and attended UC Riverside this summer for an exciting new bioinformatics project.

OUTSTANDING ALUM & CSU FACULTY MENTOR
GEORGE A. BRUSCH IV · BIOLOGICAL SCIENCES

George A. Brusch IV, PhD (he/him) grew up in Vista, CA, and was the first person in his neighborhood to go to college. He went for a while, dropped out, and eventually obtained his B.S. in biological sciences from Cal Poly in San Luis Obispo in 2014. In 2019, he earned a Ph.D. in biology from Arizona State University. During his undergraduate studies at Cal Poly, Dr. Brusch was a member and peer mentor in LSAMP from 2011 to 2014. This experience as an LSAMP scholar significantly influenced his approach to mentorship and service throughout his career to date. Driven by a desire to give back to the scientific community and support aspiring scientists, Dr. Brusch actively engages in mentorship roles. He has mentored over 36 undergraduate students at CSU San Marcos since 2022, where he currently is an assistant professor, as well as at Oklahoma State University and Arizona State University previously. He served as a mentor for the U-RISE and the LSAMP programs at CSU San Marcos. Furthermore, Dr. Brusch dedicates his time to various service activities, including participation in diversity, equity, and inclusion task forces and committees. Currently, his lab on campus researches how animals, primarily snakes, survive in environments with little water. He is also a co-author of more than 20 peer-reviewed manuscripts, the majority of which have undergraduate students as co-authors.

OUTSTANDING RESEARCH & CREATIVE ACTIVITY IN STEM
KATHY YE · ARCHITECTURE

Kathy Ye, a fourth-year architecture student at Cal Poly in San Luis Obispo, has demonstrated a strong commitment to research-driven design through her critical exploration of architectural facades and building envelopes. Her work challenges surface-level aesthetics, focusing instead on performance, equity, and the social responsibility of architecture. Through independent research and mentorship – including as an LSAMP Research Scholar – Kathy has developed a thoughtful approach to design that integrates writing, analysis, and theory alongside physical modeling and digital tools. This methodology has shaped how she builds narratives within her projects—positioning design not as isolated exercises, but as contributions to broader architectural discourse. Kathy further expanded these skills during her internship at a research-focused architecture firm in 2024-25, where she observed how evidence-based inquiry and narrative-building guide design outcomes. This experience strengthened her ability to approach projects critically and iteratively, refining both process and intention. Currently preparing for her thesis year, Kathy plans to focus her research on housing equity and urban sprawl, particularly within loosely zoned redevelopment areas. Her goal is to propose innovative strategies for more sustainable, inclusive urban growth. Through her research and design work, Kathy continues to challenge conventional practices and contribute meaningful perspectives to the future of architecture. In recognition of Kathy's excellence in research & creative activity, Kathy was selected to represent her campus at the 2025 CSU-wide Student Research Competition in the Creative Arts & Design category.

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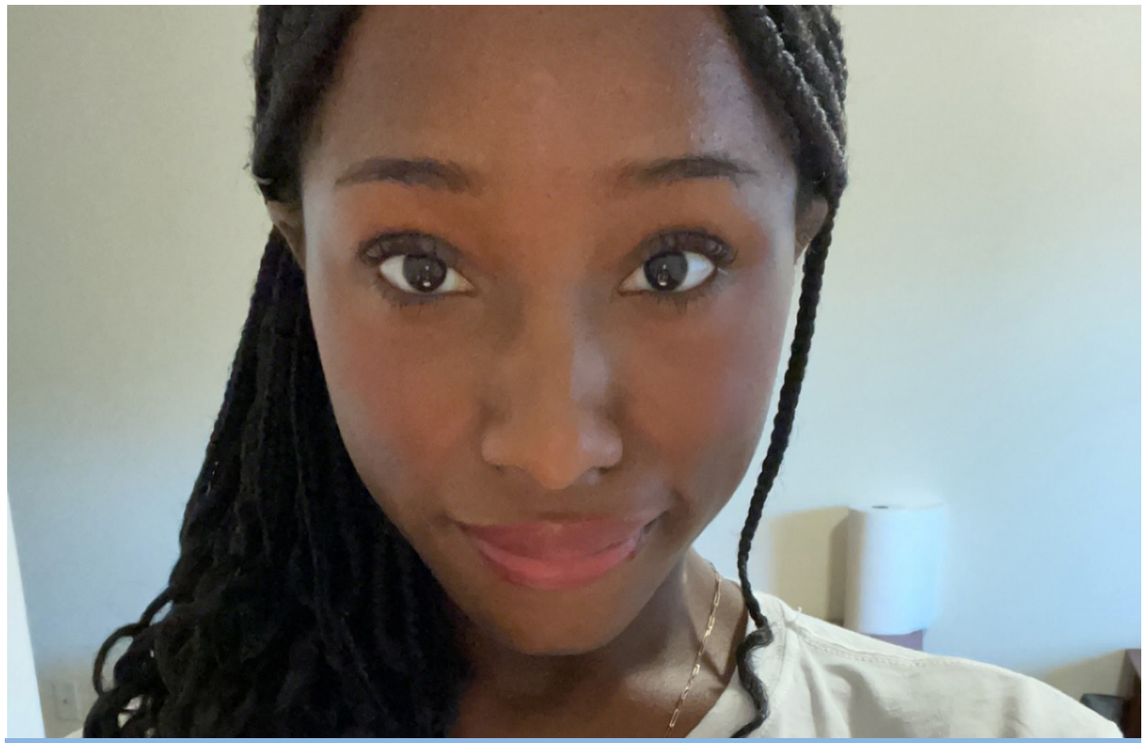
OUTSTANDING RESEARCH IN STEM
OMOEFE ODIASE · MOLECULAR CELL BIOLOGY

Omoefe Odiase is a junior at Sonoma State University majoring in molecular cell biology. She has been an active member of LSAMP since 2024. She joined Dr. Lisa Hua's Biology research lab, and has been a member since the spring of 2024. The focus of the lab is on the study of chromosomal organization during the cell cycle. Omoefe's project centers on using mouse models to study the localization patterns of centromeric proteins at metaphase. Omoefe has presented her research at the Sonoma State University Undergraduate Research Symposium in 2024, and the West Coast Biological Sciences Undergraduate Research Conference in 2025. She wants to utilize these research skills beyond her undergraduate career. Outside of academic settings, she loves to spend her time cooking, baking, and spending time in nature.



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OUTSTANDING RESEARCH IN STEM
FAVIOLA SANCHEZ · BIOLOGY

Faviola Sanchez is a fourth-year biology major at Sonoma State University. As a first-generation Chicana/Latina, Faviola's journey to higher education was shaped by perseverance and determination. The daughter of Mexican immigrants, she often viewed college as a distant dream shaped by the struggles of her background and the institutional barriers that many first-generation students face. Faviola reflects on her path with both pride and purpose. In the summer of 2023, she participated in the LSAMP-IRES program at Urgench University in Uzbekistan, marking her first hands-on research experience. There, she collaborated with CSU undergraduates and local graduate students on sorghum crop research, investigating the effects of salinity on plant growth to support local farmers in improving crop yield. This opportunity sparked her excitement for scientific research, particularly the combination of lab-based experiments and fieldwork. Her curiosity deepened upon returning to Sonoma State, where she became especially drawn to Dr. Hua's lab and its focus on diseases like cancer. Faviola is passionate about research that serves a greater purpose and sees science as a tool for meaningful social change. Outside of academics, Faviola is committed to supporting her community. As a MESA mentor, she helps guide first-year and transfer students from underserved backgrounds as they begin their own journeys in STEM. She finds strength and belonging in spaces where her identity is seen and valued. Faviola hopes to inspire other Chicanos to pursue STEM, proving that with persistence and support, representation and success in science are truly possible.

OUTSTANDING ACADEMIC
LATASHA VASQUEZ · PURE & APPLIED MATHEMATICS

Latasha Vasquez is a junior at Sonoma State University pursuing a double major in pure mathematics and applied mathematics. She feels that she wasn't a strong student when she was younger; she missed a lot of school and didn't have much direction. In spite of this, she joined her high school's math club. Even if she didn't understand exactly why at the time, math stuck with her. After high school, Latasha went to baking and pastry school. She enjoyed the process, measuring, timing, paying attention to detail. She liked that it involved both creativity and precision. Later, she worked as a bookkeeper, which kept her connected to numbers. In 2016, after a major life change, she decided to go back to school. She started in computer science because it felt like a practical choice, and she was interested in what she might be able to do with a computer science degree. Then she had a professor for algebra and calculus who helped her realize that what she really wanted to study was math. When the pandemic hit, she paused her education. After some time away, she returned—because she still cared, and still wanted to learn. She is pursuing her degree with the goal of going to graduate school, where she hopes to focus on geometry. She is drawn to how geometry describes shape, space, and structure. It feels like a way for her to get closer to how the universe works.

California State University | Stanislaus

OUTSTANDING ALUMNUS IN INDUSTRY
JOSÉ CHAVEZ · COMPUTER SCIENCE

Jose graduated *summa cum laude* from CSU Stanislaus in December 2019 with a B.S. in computer science. As a first-generation Mexican American college student, Jose demonstrated exceptional determination by supporting himself through a combination of on- and off campus scholarships and tutoring positions. In August 2020, Jose embarked on a career at Google, initially as a Cloud Technical Resident. He currently thrives as a Technical Account Manager in the San Francisco region, where he collaborates with large enterprise customers and innovative AI startups, honing his strategic problem-solving and client leadership skills. Deeply committed to giving back, Jose dedicates significant time to volunteering for recruiting events. Drawing from his own journey, he serves as an inspiring guest speaker at local schools in Merced County. He has also traveled across the country to connect with college students at events like those at New Mexico State University and with youth groups in Compton. Through outreach, he aims to demystify pathways into tech and encourage other first-generation and underrepresented students to pursue their aspirations in STEM. Looking ahead, Jose aspires to leverage his expanding network to create opportunities for friends and colleagues in the Central Valley. He also plans to pursue an MBA to further enhance his executive and leadership presence in the workplace.

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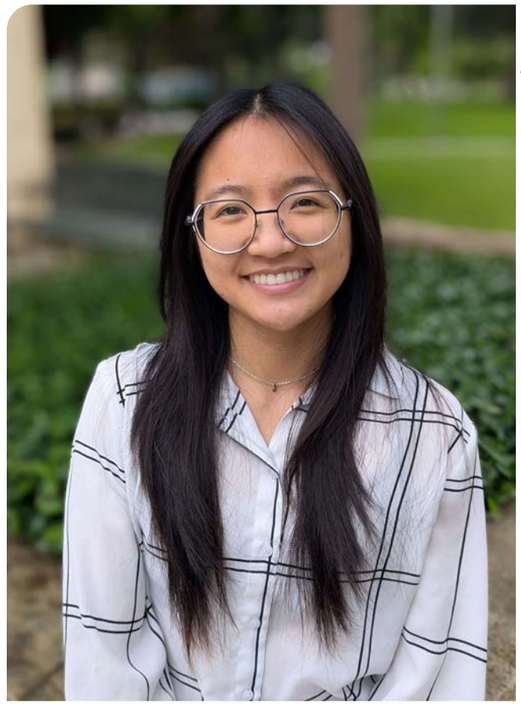
OUTSTANDING RESEARCH IN STEM
ANGELINE DAUZ · CHEMISTRY



Angeline Dauz graduated with a B.A. in chemistry with a con-centration in biochemistry in 2025. For nearly three years, she actively contributed to Dr. Gönül Schara's research group in the Department of Chemistry, presenting their findings on multiple occasions. Angeline presented her work at the CSU Biotechnology Symposium on the "Application of Engineered Toluene o-Xylene Monooxygen-ases (ToMO) as Biocatalysts to Generate a Human Metabolite of Chlorzoxazone." Her experi-ments with E. coli demonstrated ToMO's ability to metabolize chlorzoxazone into 6-hydroxychlorzoxazone, highlighting the potential of engineered enzymes in drug metabolism. During her final semester, Angeline was nominated for several research competitions, showcasing her work on the "Characterization of a Metagenome-Derived Lipase Variant Towards Enhanced Ther-mostability." Her research involved characterizing a protein-en-gineered lipase's tolerance to high tem-peratures. Angeline placed first at the CSU Stanislaus Student Research Competition and subsequently attended the ASBMB conference. She and her lab partner later received an Honorable Mention at the CSU statewide competition. Angeline values her research experience and encourages future students to engage in such opportuni-ties.

OUTSTANDING ALUMNA IN ACADEMIA
NYESA ENAKAYA · CHEMISTRY

Nyesa Enakaya, Ph.D. earned her B.S. in chemistry from CSU Stanislaus in 2015 and subsequently obtained a master's degree in chemistry from Sacramento State in 2017. Continuing her academic journey, she completed her Ph.D. at Howard University in 2023. Throughout her graduate career, Dr. Enakaya focused on gaining essential skills to prepare for a career in academia. In 2021, she was awarded the John and Elizabeth Phillips Dissertation Fellowship from Phillips Exeter Academy, which provided an opportunity for her to learn new teaching philosophies. In 2023, Dr. Enakaya joined Trinity Washington Univer-sity as an assistant professor of chemistry and was awarded a Clare Boothe Luce professorship from the Henry Luce Foundation. Her research has centered on the production and evaluation of small molecules that have diverse effects, including inhibiting bacterial growth or Campus Coordinators: treating sickle-cell disease.

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