SJSU Research Foundation
2025 Annual Report

SAN JOSÉ STATE UNIVERSITY
DIVISION OF RESEARCH AND INNOVATION

The numbers and statistics presented in this report are limited to the activity managed by the San José State University Research Foundation and are not representative of the overall research expenditures of the larger institution as there are programs funded directly by the institution or through the Tower Foundation.

The annual report also reflects award activity or gross sponsor commitments recorded in the fiscal year. The audited financial statements reflect fiscal year expenses on sponsored awards. In many cases, expenses are actually lower than the award activity because of multi-year awards, which are recorded in their entirety when received but expended over multiple years.

The San José State University community recognizes that the present-day Muwekma Ohlone Tribe, with an enrolled Bureau of Indian Affairs documented membership of over 550, is comprised of all of the known surviving American Indian lineages aboriginal to the San Francisco Bay region who trace their ancestry through the Missions Santa Clara, San José, and Dolores, during the advent of the Hispano-European empire into Alta California; and who are the successors and living members of the sovereign, historic, previously Federally Recognized Verona Band of Alameda County.

Furthermore, the San José State University community recognizes that the university is established within the Thámien Ohlone-speaking tribal ethnohistoric territory, which based upon the unratified federal treaties of 1851-1852, includes the unceded ancestral lands of the Muwekma Ohlone Tribe of the San Francisco Bay Area. Some of the enrolled Muwekma lineages are descended from direct ancestors from the Thámien Ohlone tribal territory whose ancestors had affiliation with Mission Santa Clara.

The San José State University community also recognizes the importance of this land to the indigenous Muwekma Ohlone people of this region, and consistent with our principles of community and diversity strives to be good stewards on behalf of the Muwekma Ohlone Tribe whose land we occupy.

Some content in this report was generated or enhanced using artificial intelligence (AI) tools. All AI-assisted material was reviewed and edited by our team to ensure accuracy, clarity, and alignment with our standards.

COVER: Shweta Raghuraman, ‘25 BS, ‘26 MS Biomedical Engineering, with a silicon wafer used to grow and monitor synthetic blood vessel grafts in Dr. Patrick Jurney’s lab. Learn about Dr. Jurney’s $425K National Institutes of Health research award on page 15.

THIS PAGE: As part of a cybersecurity workforce pilot program with two other CSU campuses, a WITH-Cyber student researcher presents their group’s interactive game designed to teach school-aged children cybersecurity basics and best practices. Read more about the $1M grant on page 18.

CONTENTS

ABOUT

The San José State University Research Foundation is a non-profit 501(c)(3) California corporation that operates solely for the benefit of San José State University. It is an “auxiliary” of San José State University.

Auxiliary organizations at the California State University (CSU) are nonprofit organizations and separate legal entities. They operate pursuant to written operating agreements with the CSU Board of Trustees, have separate governing boards with close connections to a campus, and follow all legal and policy rules established by the CSU system and the respective campus administration.

Auxiliary organizations were created to perform essential functions associated with a post-secondary educational institution, which under California law were difficult, cumbersome, or legally restricted for the university and were not supported by state funding.

The entire team at the SJSU Research Foundation continues to be inspired by the endeavors and accomplishments of SJSU researchers. We are committed to supporting their efforts through our dedication to providing streamlined, robust, and efficient research administration systems and services.

MESSAGE FROM LEADERSHIP

Marc d'Alarcao

President
SJSU Research Foundation
Board of Directors

Interim Vice President
Research and Innovation
San José State University

Dean
College of Graduate Studies
San José State University

Jessica Trask

Vice President
SJSU Research Foundation
Board of Directors

Interim Associate Vice President
Research
San José State University

Andrew Exner

Executive Director
SJSU Research Foundation

Board Secretary
SJSU Research Foundation
Board of Directors

San José State University Research Foundation continues to achieve new heights in research excellence and impact. We are pleased to report that in the **2023–2024 fiscal year**, the Foundation managed **$73 million in awarded research funding**, a testament to the innovation, resilience, and dedication of our faculty, staff, and students.

With **281 new awards** and **over $203 million in submitted proposals**, our researchers are tackling some of the most critical challenges of our time — from **climate science and AI-driven solutions to advancements in healthcare, engineering, and the arts**. These efforts solidify SJSU's standing as a **national leader in research among non-PhD granting institutions** and amplify our impact in Silicon Valley and beyond.

San José State University Research Foundation-managed **total expenditures on sponsored activity grew to $60.3 million and total research expenditures across the institution grew to $88.9 million**, representing another year of steady growth. This expansion has allowed increased investment in **student research opportunities, faculty support, and interdisciplinary innovation**. Additionally, the Foundation returned **$3.74 million in reimbursement** to SJSU, helping to support faculty and strengthen institutional resources and infrastructure.

A closer look at our funding sources highlights the continued trust in SJSU's research enterprise:

- **Federal Funding:** $38.9M
- **State Grants:** $23.3M
- **Industry & Non-Profit Partnerships:** $6M
- **Other funding sources:** $5.4M

As we look to the future, we remain committed to **expanding research opportunities, fostering strategic partnerships, and driving innovation** across all disciplines. The success of our faculty and students reaffirms our belief that research is not just about discovery — it is about **impact, transformation, and creating a better future for all.**

We extend our deepest gratitude to our **research community, partners, and supporters** who generated this success. Together, we will continue to push the boundaries of knowledge, build new pathways for discovery, and position SJSU as a global leader in research and innovation.

Thank you for your dedication and contributions to this journey.

SJSU | RESEARCH FOUNDATION

SJSU RESEARCH STRENGTHS

San José State University, recognized as the #3 “Most Innovative University in the West” by U.S. News & World Report (2024) and ranked 4th among all public universities and 16th overall in the nation by The Wall Street Journal (2024), organizes its research strengths into the following six areas.

Emerging Technology

- Artificial Intelligence
- Machine Learning
- Air and Space
- Robotics and Drones
- Semiconductors
- Quantum Technology
- Cybersecurity and Networks

Climate Resilience

- Land and Water Studies
- Energy
- Wildfire
- Mariculture
- Species Health
- Environmental Justice

Health and Well-Being

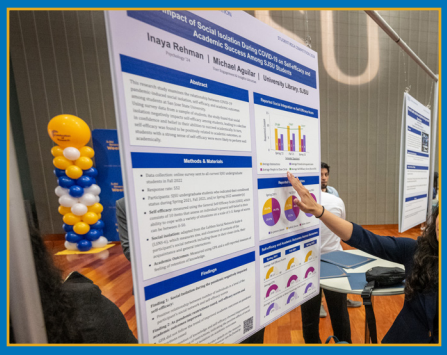
- Biotechnology
- Drug Discovery
- Biomedical Engineering
- Health Disparities
- Evolved Caregiving
- Mental, Behavioral Health

3rd most innovative university in the west

– U.S. News & World Report (2024)

SJSU | RESEARCH FOUNDATION

#1 SAN JOSÉ STATE UNIVERSITY MOST TRANSFORMATIVE UNIVERSITY —*Money* magazine



Human Factors

- Human Interaction with Technology: Behavioral Impact on Space Exploration, Earthside Integrations

Social Justice

- Inclusive Libraries
- Cultural Studies in Action
- Learning and Development
- Emancipatory Education
- Mass Incarceration

Urban Futures

- Ethical Technology
- Transportation & Urban Planning
- Civic Humanities & Public Arts
- Public Policy
- Financial Studies

4th TOP PUBLIC UNIVERSITY – The Wall Street Journal (2024)

and **16th OVERALL** – The Wall Street Journal (2024)

Numbers and Metrics

SJSU Research Foundation numbers for
Fiscal Year 2023-24, which ended on June 30, 2024

281 Awards

received valued at more than **$73 MILLION.**

405 Proposals

submitted valued at more than **$205 MILLION (273 FACULTY).**

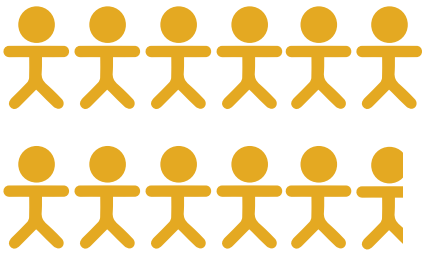
$60.3 Million

of total expenditures on sponsored activity across 574 active projects.

$3.74 Million

returned to San José State University in reimbursements.

235 SJSU Faculty



engaged in sponsored research projects, grants, or contracts, managed by the Research Foundation.

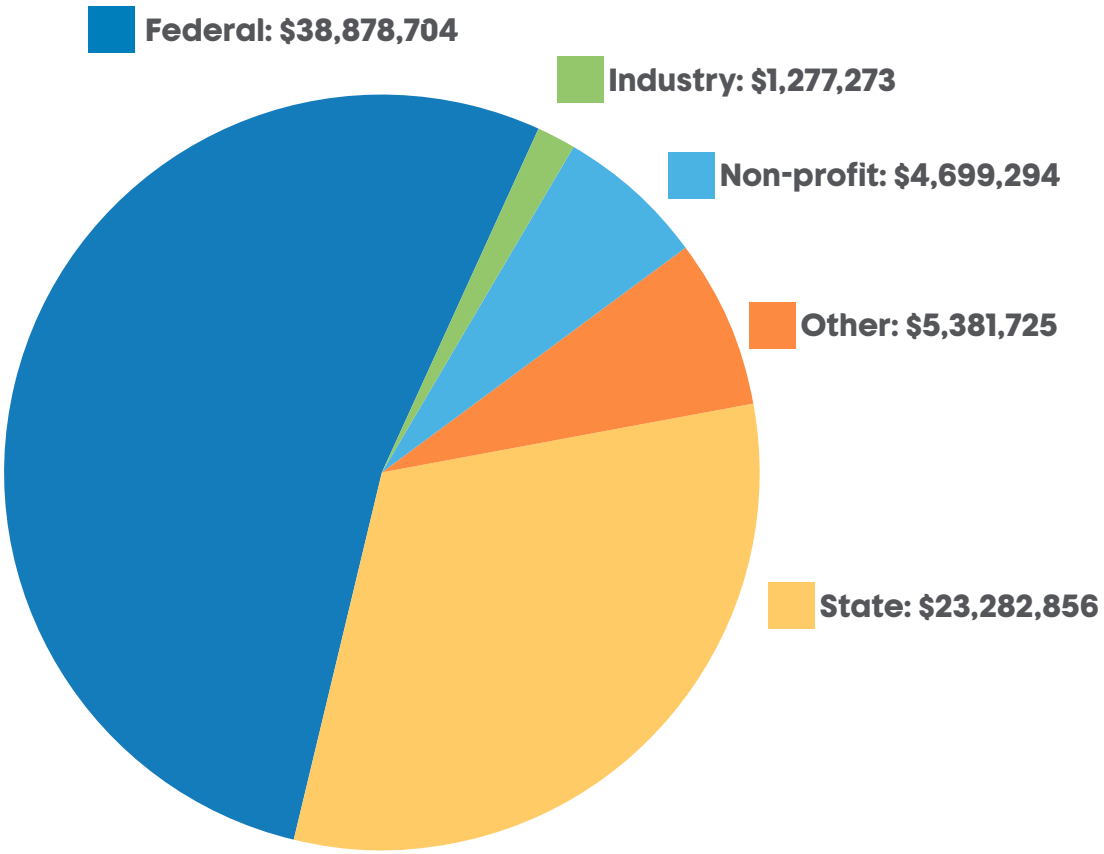
713 SJSU Students

engaged in sponsored research projects, grants, or contracts managed by the Research Foundation.

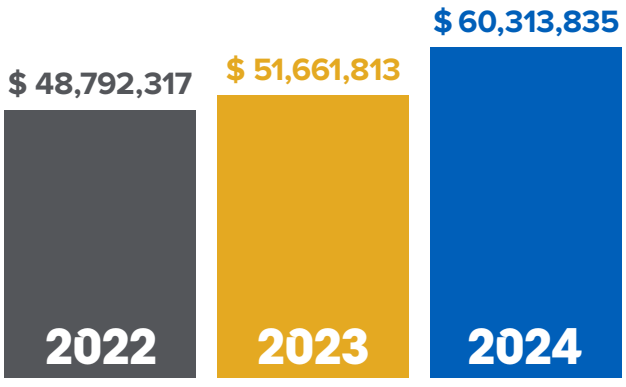
344 SJSU Project Staff

engaged in sponsored research projects, grants, or contracts, managed by the Research Foundation.

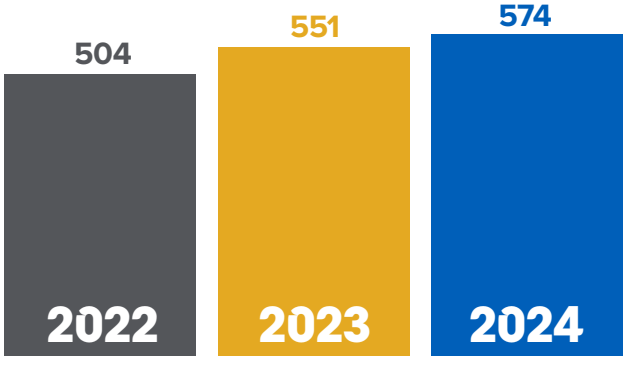
FISCAL YEAR 2023-2024 AWARDS



Sponsored Programs Expenditures



Total Number of Active Awards



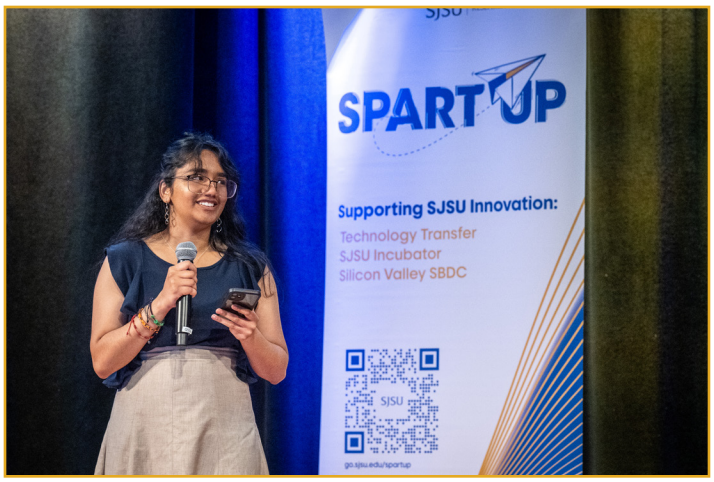
FY2023-24 Research and Innovation timeline

Q1: JULY, AUGUST, SEPTEMBER 2023

- Research Clusters Announced
  - Opportunities for large, interdisciplinary collaboration announced with dedicated research time and programming offered to enhance awareness and PI connection
- SpartUp Proof of Concept Program Launches
  - Money, mentors, and milestones for prototyping

Q2: OCTOBER, NOVEMBER, DECEMBER 2023

- San José GEAR UP community Achievement Project (cAP):
  - $10.5M Project for K12-to-Higher Ed Pathways; $1.5M per year for seven years
- SJSU Submits Its First NIH Center Proposal
  - $20M requested to fund the Advancing Trust in Health Science Among Immigrants Center, aimed at achieving health equity for Hispanic and Asian immigrant communities



Q3: JANUARY, FEBRUARY, MARCH 2024

- Research Week
  - 13 events over six days, reaching 500+ in-person and online attendees
  - Professor Hui-Yung Wong receives the inaugural Industry-Sponsored Researcher Award for his work in industry-funded cryogenic semiconductor technology research
- SJSU students competed in the 38th Annual CSU Student RSCA Competition
  - 12 students, 10 projects, three 1st place, one 2nd place, one Honorable Mention
- Notable Award: Broaden and Build the Northern California Healthcare Workforce
  - $3.4M from California's Health Care Access and Information to expand pathways for first-generation students into high-demand health professions

Q4: APRIL, MAY, JUNE 2024

- FY2024 totals
  - $73.5M in funding received (up from $69M in 2022-23)
  - 405 proposals submitted (up from 328 in 2022-23)
- Annual Pitch Jam
  - 25 teams with startups
  - All winners grew their startup ideas through other SpartUp programming
- SBDC launches Venture Cohort with Pitch Global
  - 20 pilot clients, building on its unparalleled access to no-cost expertise from Silicon Valley entrepreneurs

The staff behind Project Phalanx: Joel Morales, Dr. Quinton Smith. Dr. Shonda Goward, Dr. Deanna Peck, Dr. Clifton Oyamot, Yajayra Tovar, and Dr. Matthew Masucci. Goward and team received a $2.18M grant from the U.S. Department of Education to create a support program for undergraduate students on academic notice.

Shonda Goward

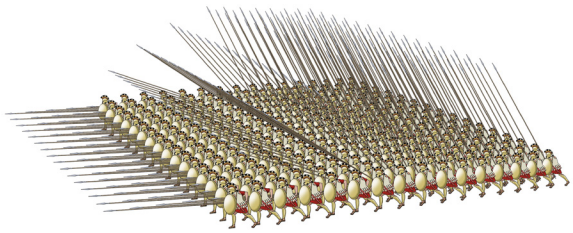
Spartan Phalanx: A Project to Support Students on Academic Notice

Sometimes undergraduate students just need a helping hand to turn an academic setback into success. It can be a student's first time with college-level courses, or learning to balance work with school. Regardless of the reason, Shonda Goward and her team in the Office for Undergraduate Advising and Success want to ensure real-world advice and support is available for students in need, so they can lift themselves up, regain their academic footing, and move forward to achieve their career goals.

Goward is the associate vice provost for Undergraduate Advising and Success, and she and her team are preparing to launch a special program in the spring of 2025 to ensure that San José State University students receive this kind of academic lifeline.

Their project, the Spartan Phalanx, is funded by a $2.18M, five-year grant from the U.S. Department of Education and focuses on meeting the needs of students on academic notice. "It will allow us to better support students on probation, especially low-income, minority and underserved students by improving academic advising services, providing greater inclusion, and increasing successful outcomes," she says.

"Our project will help students who have had academic difficulties get back on track before they are dismissed from the university. We will provide coaching support to identify their strengths and provide the support skills needed, so they can bounce back from their struggles." One could argue, a worthy undertaking for a world-class university.



A phalanx, the namesake of Goward and Morales' program, is a tightly packed military formation that advances as a unified force with shields locked together. Artwork by Massimo Todaro.

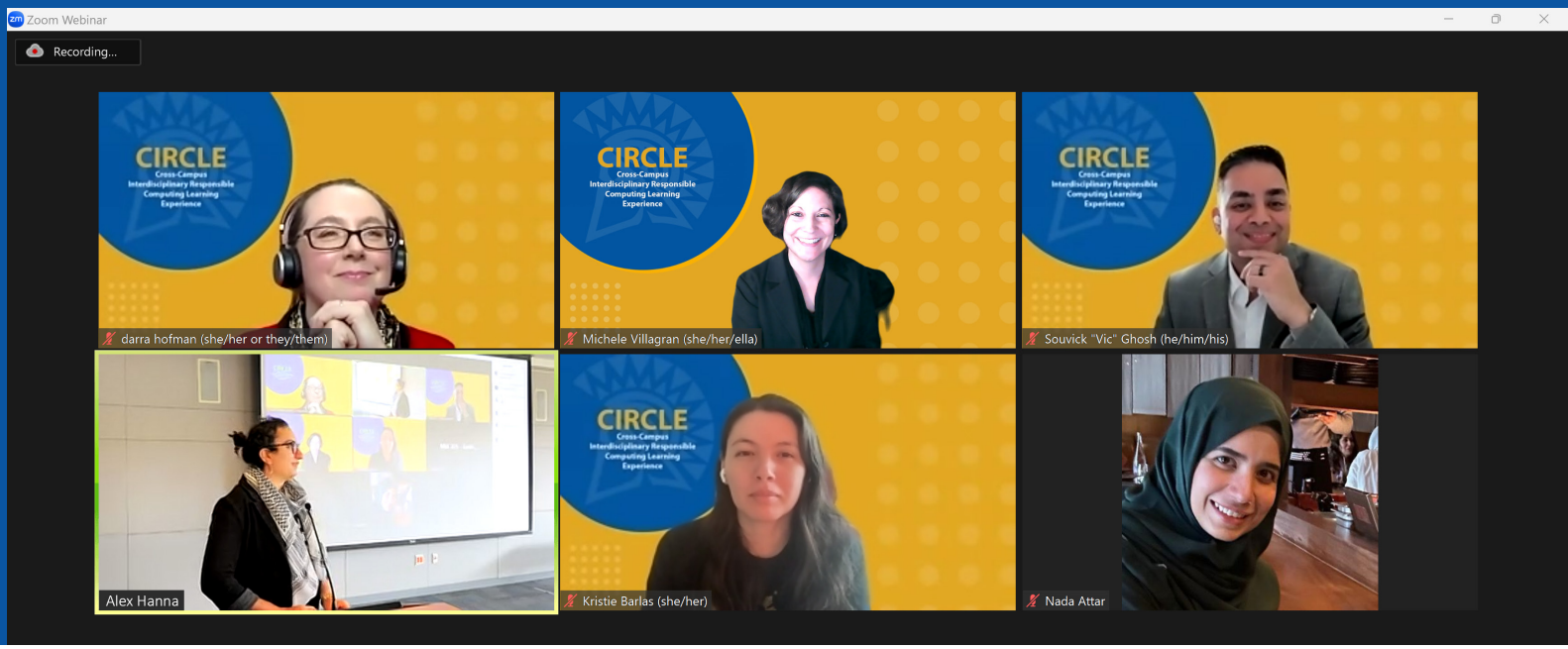
Spartan Phalanx: Holistic Support to Retain Students on Academic Probation

U.S. Department of Education

Award(s): $2,180,000
as of January 16, 2025

In January 2025, the Spartan Phalanx brought together faculty, academic advisors, and education master's students for a two-day training workshop focused on meeting student advisees on academic notice where they are—recognizing their unique challenges and goals—to provide meaningful guidance, services, and resources for their success.

***Discover** the advising resources available to undergraduate students at SJSU.*



Spanning multiple time zones, the CIRCLE team, led by Dr. Darra Hofman (top left), hosted a hybrid panel on May 5, 2024, at SJSU's Dr. Martin Luther King, Jr. Library, exploring academia's role in responsible computing and its social impact.

Darra Hofman, Michele A. L. Villagran, Souvick Ghosh and Nada Attar

Promoting Responsible Computing and Artificial Intelligence For Greater Good

Darra Hofman believes San José State University has a special role, as Silicon Valley's public university, to foster public conversations about responsible computing and using emerging technologies like artificial intelligence in ways that are strictly positive. Her research focuses on developing practical ways to ensure this lofty goal is achieved in the real world.

Hofman is an assistant professor in the College of Information, Data and Society. She is collaborating on a research project with Associate Professor Michele A. L. Villagran and Assistant Professor Souvick Ghosh in the same college, along with Assistant Professor Nada Attar in the College of Science. Their work is designed to engage the community on the vital topic of responsible computing and AI.

She and her colleagues are ramping up their efforts thanks to a recent $150K research grant award from the Mozilla Foundation. "Our CIRCLE Project is an interdisciplinary project involving students, faculty, and staff members at San José State University," Hofman says. "We want to promote responsible computing and AI in ways that result in positive social impacts."

"Our team is mentoring the newly-formed, student-led Responsible Computing Club and bringing in outside speakers to present on topics ranging from ethical AI to indigenous data sovereignty," Hofman adds. "For our faculty colleagues, we've introduced a selection of course modules with lectures, readings, and exercises on topics ranging from responsible computing to cybersecurity."

On May 5, 2024, the CIRCLE team held a hybrid panel at SJSU's Dr. Martin Luther King, Jr. Library, sparking dialogue on how academia can shape responsible computing and drive meaningful social change.

***Explore** the Cross-Campus Interdisciplinary Responsible Computing Learning Experience (CIRCLE) Project.*

Cross-Campus Interdisciplinary Responsible Computing Learning Experience (CIRCLE)

Mozilla Foundation

Award(s): $150,000
as of January 16, 2025

SJSU researchers Jorjeta Jetcheva, Yolanda Wiggins, Brianne Gutmann, Carlos Rojas, and William B. Andreopoulos are leading a new STEM project to engage and empower underrecognized high school students from the community.

Jorjeta Jetcheva, Yolanda Wiggins, Brianne Gutmann, Carlos Rojas, and William B. Andreopolous

Empowering Underrepresented Students to Succeed in Engineering and Computer Science

Imagine the challenge: You're a talented rising high-school senior from a modest background, and you've accepted an invitation to participate in an intensive, four-week residential STEM workshop at SJSU. Your first thought might be: What a great opportunity! Then, to your disappointment, you see the daunting curriculum: math, physics, computer programming, and Artificial Intelligence (AI). Subsequently, you begin to ponder, what have I gotten myself into?

This is exactly the kind of challenge Assistant Professor of Computer Engineering Jorjeta Jetcheva loves. Helping students is one of her biggest passions. Now, thanks to a $2.5M grant from the U.S. National Science Foundation, she and her colleagues are sharing their knowledge with local students from families working hard to make ends meet and providing them with scholarships, so they can pursue successful degrees in engineering and computer science at San José State.

Her interdisciplinary research project team includes Co-Principal Investigators Carlos Rojas, Assistant Professor, Computer Engineering Department; Dr. Yolanda Wiggins, Assistant Professor, Department of Sociology and Interdisciplinary Social Sciences; Brianne Gutmann, Assistant Professor, Department of Physics and Astronomy; and William B. Andreopoulos, Assistant Professor, Department of Computer Science. All are committed to empowering students, especially those who are underrepresented and financially disadvantaged, to succeed in STEM.

"Our goal is to create an environment at San José State University, where all students see themselves represented in STEM, and they feel a sense of belonging," says Jetcheva, "One where they are part of a community, and they have access to support and resources needed to succeed", says Jetcheva.

S-STEM: Empowering Low-Income Students to Succeed in Engineering and Computer Science

National Science Foundation

Award(s): $2,499,411
as of January 16, 2025

***Learn more** about the Computer Engineering Department at SJSU.*

Dr. Patrick Jurney (left) from the Biomedical Engineering Department is focused on finding new ways to improve synthetic blood vessel grafts by modifying their surfaces to better mimic the natural environment of our blood vessels. He is pictured with the staff from his laboratory, Nourdean Shraim, '25 BS, '26 MS Biomedical Engineering, Christian Catano, '24 BS, '25 MS Biomedical Engineering, and Shweta Raghuraman, '25 BS, '26 MS Biomedical Engineering.

Patrick Jurney

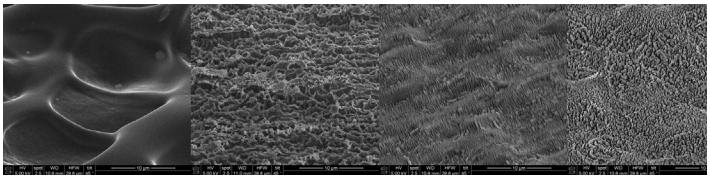
Improving Synthetic Blood Vessel Grafts by Modifying Their Surfaces

Patrick Jurney sure hopes your blood vessels are healthy and strong. At the same time, he knows full well that is not the case for many Americans and others living around the world. With this in mind, he has dedicated himself to finding ways to improve synthetic blood vessel grafts by modifying their surfaces to better mimic the natural environment of our blood vessels.

Jurney is an assistant professor in the Biomedical Engineering Department within the Charles W. Davidson College of Engineering. With his expert view into the microscopic world of human blood vessels, the technical terms are as exotic as the rarest tropical fish: Mitochondria (widely known as the energy factories of eukaryotic cells), Nanotopography (used to influence the behavior of cells in blood vessels), and Endothelialization (the process of lining blood vessels with a single layer of endothelial cells). Fortunately, the specific goal of his research is exceedingly simple — find ways to improve synthetic blood vessel grafts and prevent complications.

"My research investigates methods to improve synthetic blood vessel grafts by modifying their surfaces to better mimic the natural environment of our blood vessels," Jurney says. "Specifically, I study how surface chemistry and topography can enhance the ability of these grafts to support healthy cell growth, which is crucial in preventing serious complications like blood clots and tissue buildup."

Jurney also explores the role of mitochondria in these cells to understand how energy production and cell health are influenced by these surface modifications. For Jurney, science, medicine, and engineering merge at the nano level. Championing the healthcare goal of all this exploration could not be more compelling — develop more effective treatments for cardiovascular disease.



The SEM panel shows poly(vinyl alcohol) (PVA) hydrogel surfaces before and after treatment with reactive ion plasma (RIP), all at the same magnification, representing the scale of a single vascular cell. From left to right: untreated PVA, oxygen plasma (used for sterilization), nitrogen plasma, and argon plasma. Each plasma treatment imparts distinct nanotopographies, offering a glimpse of what a cell might 'see' topographically and influencing vascular cell affinity differently.

***Read** a recently published journal article co-authored by Dr. Journey, exploring how plasma-treated polymer chemistry affects cell growth.*

Reactive Ion Plasma Treatment of Cardiovascular Biomaterials to Understand the Effect of Nanotopography on Endothelialization

National Institutes of Health

Award(s): $425,788
as of January 16, 2025

Professor Tina Korani from the College of Humanities and the Arts collaborates with colleagues, city officials, and community organizers each year to stage The International Mother Language Celebration.

Tina Korani

Recognizing the Richness of the Linguistic Spectrum: The International Mother Language Celebration

Enter the student union at any major university in the U.S. and you will hear a chorus of different languages spoken. This is an integral part of the cultural landscape at any large university campus. San José State University (SJSU) is certainly no exception. It is fortunate to have faculty who strive to ensure this rich linguistic heritage is celebrated.

Enter Tina Korani, associate professor of digital media, in the School of Journalism and Mass Communications at the College of Humanities and the Arts. Her approach is simple and direct. She joins with colleagues, city officials, and community organizers to stage an annual event called, The International Mother Language Celebration.

"Ours is an annual event that receives financial support from the City of San José and celebrates linguistic variety and cultural pride through art, music, and live performances. It provides a platform for participants to showcase their heritage and learn about others in an interactive, inclusive way," Korani says.

"The event averages about 450 attendees annually, with participation from a wide range of cultural groups. It has created a strong connection between SJSU and the local community. In the future, we hope to expand the event's reach and incorporate more digital storytelling components," she adds.

Another positive impact of the project is student involvement. Each year, five to ten SJSU students contribute to the event's planning and execution. Their participation adds to their project management, cultural outreach, and event coordination skills. Moreover, it ensures that the vibrant chorus of different languages is heard throughout the community.

"The International Mother Language Celebration is more than an event — it's a meaningful tradition, which fosters understanding, connection, and pride across cultures. By providing a platform for shared stories and experiences, it strengthens the bonds between SJSU and the local community while empowering students to develop skills that extend far beyond the classroom. This celebration amplifies the beauty of multilingual expression, ensuring every voice has a place in the vibrant tapestry of our shared cultural landscape."

International Mother Language Celebration

City of San José

Award(s): $12,318
as of January 16, 2025

A vibrant showcase of cultural expression—dancers from diverse backgrounds perform at the International Mother Language Celebration, highlighting the richness of linguistic and artistic traditions.

***Watch** highlights from the 6th Annual International Mother Language Celebration.*

Shaping the future of inclusive education, Project MOSAIC is a $1.3M, five-year initiative equipping the next generation of teachers to make a lasting difference for special needs students in our community.

Sudha Krishnan, Andrea Golloher and Lisa Simpson

Project MOSAIC: Expanding the Special Education Teacher Workforce

A mosaic is a picture or pattern created by arranging together small, colored pieces of stone, tile, or glass. In Assistant Professor Sudha Krishnan's research area of special education however, a mosaic is a diverse workforce of teachers prepared to help special needs students thrive in an unforgiving world.

Krishnan is the principal investigator of Project MOSAIC, a $1.3M, five-year project designed to prepare new teachers to do vital work on behalf of special needs students. She is an assistant professor in the Department of Special Education at the Connie L. Lurie College of Education, where she collaborates with Andrea Golloher, associate professor, and Lisa Simpson, department chair, as co-principal investigators.

"We are focused on recruiting the best candidates in order to increase the number of teachers well-prepared to address the special needs of students and their families," Krishnan says. "We are working hard to expand the special education teacher workforce in order to match the needs of diverse student populations."

While increasing the number of qualified teachers is essential, it's equally important to ensure that these educators reflect the diverse backgrounds of the students they serve.

"Representation in the classroom brings about a sense of belonging, cultural understanding, and student engagement. When students see themselves reflected in their educators, it can validate their identity and provide positive role models, helping to build confidence and motivation to succeed academically," Krishnan states.

SJSU students participating in the program benefit by receiving full tuition coverage and funds to purchase textbooks and materials. They also have the opportunity to join a professional organization, which can provide valuable networking opportunities. Students can also receive funds to attend professional conferences.

Krishnan believes the MOSAIC grant will spark vital interest in the San José community for individuals to pursue teaching careers focused on students with disabilities. One of the benefits of the grant is that it makes it possible for teaching candidates to receive training in cultural responsiveness. More importantly, all aspects of the program are designed to benefit culturally and linguistically diverse students.



Assistant professor Sudha Krishnan is the principal investigator, alongside co-principal investigators associate professor Andrea Golloher and department chair Lisa Simpson — all from the Department of Special Education at the Connie L. Lurie College of Education.

***Find out** more about Project MOSAIC and the SJSU Department of Special Education.*

Project Mosaic

U.S. Department of Education

Award(s): $500,000
as of January 16, 2025

Professors Melody Moh and Xiao Su are in the foreground, with James Morgan, Seshadri Paravastu, Yan Chen, and Kevin Smith, and student researchers who are developing cybersecurity educational video games, a part of the funded project of creating a cybersecurity workforce pilot program with two other CSU campuses.

WORKFORCE Innovation Technology Hubs WITH CYBER

Melody Moh and Xiao Su

Expanding the Cybersecurity Workforce By Promoting Education and Research Opportunities

Our world runs on information moving at close to the speed of light across far-flung networks that span oceans and continents. We depend on this reliable flow of data for both work and leisure to stay informed and expand our knowledge of the world. Yet, the technology that allows us to benefit from this constant flow of information may also bring different forms of cyber attacks and AI risks. That's where Melody Moh and Xiao Su research endeavors have benefits that extend beyond academia.

Melody Moh is a professor in the Department of Computer Science at the College of Science. Her colleague Xiao Su is the Associate Dean for Graduate Studies and Research at the Charles W. Davidson College of Engineering. They are doing their part with a major new workforce development and research project: Workforce Innovative Technology Hub in Cyber, or WITH-Cyber, part of SWAT: Cybersecurity Regional Alliances and Multistakeholder Partnerships Pilot Program.

Their project was made possible by a significant $1M grant from the State of California. Their goal is to work with local community colleges and major tech companies in the Silicon Valley, as well as different departments and colleges within SJSU, to build a pathway for students to pursue the many interdisciplinary educational and career opportunities in the fast-growing field of cybersecurity.

"This is a state-wide initiative in partnership with California State University, San Bernardino and Fresno State. Our project seeks to develop a robust cyber workforce with deep knowledge and skills in cybersecurity, artificial intelligence, and machine learning through research, education, and mentorship, as well as to educate K-12 students in these areas," Moh says. "We want students to pursue all the educational and work opportunities in this critical field, and to fill the growing needs of a skilled cybersecurity workforce in defending against cyber attacks and AI risks."

A WITH-Cyber student researcher presents her group's findings and their interactive game, designed to teach school-aged children cybersecurity basics and best practices.

SWAT: Cybersecurity Regional Alliances and Multistakeholder Partnerships Pilot Program

State of California

Award(s): $1,000,000
as of January 16, 2025

***Get details** on the Workforce Innovation Technology Hub in Cyber (WITH Cyber) project in collaboration with SJSU, Cal State San Bernardino, and Fresno State University.*

Professor Aaron Romanowsky, Department of Physics and Astronomy, College of Science, conducts research to unlock the mysterious origins of ultra-diffuse galaxies. He is pictured with members of his lab staff, Yashraj Bains, '25 Physics, and Logan O'Brien, '25 MS Physics.

Aaron Romanowsky

Unlocking the Origins of Ultra-Diffuse Galaxies

It's the start of a busy morning, and you have to stop to remember where you left your missing car keys; the search is on. Now, consider a comparison with the searches astrophysicist Aaron Romanowsky does. He studies how many galaxies are missing dark matter, and why some of them form spectacular clusters of stars and others don't. A loftier kind of search, you might agree.

Welcome to the world of Romanowsky, a distinguished professor in the Department of Physics and Astronomy at the College of Science – a world in which his galactic searches are supported by a prestigious grant from the U.S. National Science Foundation, which is a research award designed to support an ambitious project titled "Unlocking the Origins of Ultra-Diffuse Galaxies."

"Ultra-diffuse galaxies (UDGs) are comparable in size to ordinary spirals, but they have dwarf galaxy-like luminosities," Professor Romanowsky says. "Our research combines photometric and spectroscopic data obtained with 8 and 10m-class telescopes, along with state-of-the-art simulations of galaxy and star cluster evolution in a cosmological context."

"The deeper we probe into the night sky with advanced telescopes, the more surprises we discover," he adds. "Such as the perplexing population of "ultra-diffuse" galaxies that do not follow conventional ideas about dark matter. Our team is using imaging and spectroscopy from telescopes on the ground and in space to understand their composition and origins."

***View images** of ultra-diffuse galaxies and read a journal article on the subject, co-authored by Professor Romanowsky.*

Professor Romanowsky and his laboratory team at the Mauna Kea Observatories on Hawaii Island, home to the world's largest astronomical observatory, which features telescopes operated by astronomers from 11 different countries.

RUI: Unlocking the Origins of Ultra-Diffuse Galaxies

National Science Foundation

Award(s): $378,953
as of January 16, 2025

Audrey Shillington and Joe Grzywacz know that addressing health professional staffing shortages requires engaging with high school students from rural and underserved areas. They secured a $3.4M grant from the Department of Health Care Access and Information for their project aimed at preparing students from underserved areas to join the healthcare profession experiencing shortages in staffing.

Audrey Shillington and Joe Grzywacz

Addressing Healthcare Professional Shortages in Regions with Unmet Needs

Audrey Shillington and Joe Grzywacz demonstrate a strategic understanding of the health professional staffing crisis by proactively targeting the root of the issue. Recognizing the critical need to build a diverse and sustainable workforce, they actively engage with high school students from underserved areas, ensuring that future generations are prepared and inspired to enter the healthcare field.

Shillington is the dean of the College of Health and Human Sciences, where Grzywacz is the associate dean for research. Recently, they were awarded a five-year, $3.4M grant from the California Department of Health Care Access and Information to help SJSU expand the healthcare workforce in Northern California.

“This grant will ease the financial burden for aspiring healthcare professionals, allowing them to focus on their studies and training,” Shillington says. “Nationally, we are regularly reminded that there’s a dire need for nurses and nursing assistants,” Grzywacz adds. “Not ongoing or serious, but dire.”

Their project, Broaden and Build the Northern California Health Care Workforce, seeks to address a scarcity of new employees in the healthcare field. This is consistent with the university’s stated goal of engaging underserved, diverse populations to support the next generation of leaders in the field.

The initial stage of the project focuses on outreach and training. Representatives from SJSU, including school representatives and peer mentors, will travel to underserved regions experiencing shortages in health professional staffing. The goal is simple: speak to students about opportunities in healthcare education and the benefits of a lifelong career in the field.

Photo courtesy of James Tensuan

Broaden and Build the Northern CA Health Care Workforce

California Department of Health Care Access and Information

Award(s): $3,400,000
as of January 16, 2025

***Explore** the programs and initiatives from the College of Health and Human Sciences.*

The Interdisciplinary Science Building at San José State University—a striking eight-story hub for innovation and collaboration—opened in April 2024 and now serves as a cornerstone for cutting-edge research and hands-on science education.

The New Interdisciplinary Science Building

A World-Class, Collaborative Research Space for Science Students, Professors, and Researchers

Take a first-time look at the soaring blue metal and glass facade of the Interdisciplinary Science Building at San José State University–which opened in the spring of 2024–and you might see just another modern structure. But look closer, and you'll discover something far more inspiring. This 164,000-square-foot, $181M collaborative learning space is a testament to vision, dedication, and innovation. University leaders, architects, and builders came together with a shared commitment—to create a state-of-the-art facility that fuels discovery, fosters collaboration, and elevates education to new heights. The result is not just a building, but a beacon of possibility, where the future of science and learning unfolds.

Despite a host of challenges, the collaboration of faculty, students, administrators, architects and builders found a way to create a collaborative workspace for students, professors, and researchers across a range of scientific fields. It's a place for advanced scientific research and study any large university would be proud to have. Now, one year since its doors first opened, the ISB has proven to be a hub of innovation, fostering groundbreaking research, as well as hands-on learning and research experiences for students.

"We designed the ISB to support transformative student experiences in state-of-the-art teaching labs and classrooms, industry-standard research labs, and flexible collaboration spaces," says College of Science Dean Michael Kaufman.

The ISB has been a catalyst for science learning and discovery at SJSU. "Our teaching labs allow us to train students using techniques needed to pursue careers in fields such as biotechnology and pharmaceuticals," adds College of Science Associate Dean for Research Miri VanHoven.

"Our Wildfire Interdisciplinary Research Center, which is located in the Interdisciplinary Science Building, is doing important research to provide predictive tools and informed strategies to communities and first responders in areas prone to deadly wildfires," she adds. This is the kind of real-world scientific research that advances knowledge and saves lives.

A research team discusses their findings in one of the collaborative spaces inside the Interdisciplinary Science Building.

Groundbreaking: April 2019
Official opening: April 2024
Floors: Eight
Space: 164,000-square-feet containing research and teaching laboratories, a high powered computing lab, a research VR lab, classrooms and offices, collaboration and meeting spaces, and workstations
Cost: $181,000,000

Take a virtual tour *of the Interdisciplinary Science Building through this interactive Washington Square Magazine article.*

Office of Research

Promoting Collaboration with University Partners

Anyone managing the research process at a major university needs to have the communication, coordination, and problem-solving skills of a State Department diplomat. Dr. Jessica Trask has all of these skills and more. As Interim Associate Vice President for Research, she works with staff to ensure the smooth delivery of services the university offers in support of research, scholarship, and creative activity, also known as RSCA.

“Our staff assists with proposal development, submission to external funding agencies, and guidance to ensure RSCA is conducted according to ethical and regulatory standards,” she says. “If you’re ready to launch a research project, we can help. Our research development team offers the knowledge and expertise that can make all the difference in producing a successful research grant submission.”

SJSU University researchers just entering the field and launching first-time projects face a host of challenges. This includes identifying potential funding sources. The questions are many: What are the best potential funding sources? Am I better off applying for state or federal research funding? Does the university have a successful track record with a specific agency or department? This is where staff guidance can save time and effort.

“An area of emphasis for the research development staff is working with faculty partners to support collaborative research that aligns with the strengths of our university,” Dr. Trask adds. “That means prioritizing projects in fields like semiconductors, artificial intelligence, machine learning, health and medicine, climate science, community engagement, and social justice.”

In summary, the Office of Research serves as an invaluable resource for faculty and researchers seeking to navigate the intricate landscape of academic funding. With a dedicated team and a commitment to facilitating collaborative projects that leverage the university’s unique strengths, Dr. Trask and her team foster an environment where innovative research can thrive. Through their essential support and expertise, the Office of Research not only assists in developing grant proposals that convey the importance of individual projects, highlighting their contributions to the university’s mission, but it also does so by showcasing the research’s potential impact on the academic community and society at large.

*Explore the Office of Research’s **programs and initiatives** that support faculty researchers in funding, collaboration, and project development.*

FACULTY RESEARCH FUNDING OPPORTUNITIES

The Division of Research and Innovation is proud to enhance the research, scholarship, and creative activities of the SJSU faculty through direct funding and resources, which facilitate:

- Course release
- Supplies and equipment purchases
- Student assistant hires
- External grant proposal submissions by first-time principal investigators

Previous funding opportunities included:

- **University Grants Academy**
  Offered every Spring, this opportunity provides release time to assist tenure-track and tenured faculty members as they submit their first major extramural proposal
- **SJSU RSCA Seed Grant**
  This annual opportunity supports all Unit 3 faculty as they start or complete RSCA projects
- **Student RSCA Fellowship**
  This annual opportunity supports students as they engage in research, scholarship, and creative activities, enabling them to earn a salary while devoting substantial time to their projects

*Whether you're new to research or an experienced researcher, explore the **diverse internal funding opportunities** available to SJSU faculty.*

Campus Research Opportunities for Students

At SJSU, students have many opportunities to get involved in research. The Office of Research sponsors programs that directly supports students as they engage in **research, scholarship, and creative activities (RSCA)**, and assists in the dissemination of their results and outcomes. As a hub for resources, the Office of Research connects students to various college-level, discipline-specific, or campus-wide research opportunities and prepares aspiring researchers for the research enterprise through a self-directed, asynchronous online course.

Student researchers collaborate during a project meeting, exchanging ideas and advancing their work through teamwork and shared discovery.

SJSU offers many resources and programs designed to engage students in RSCA. ***Find out how you can get involved!***

Earn a digital badge in the Student Research Training for Researchers and Creators (TRAC) Canvas course to enhance your chances of ***landing a research opportunity.***

2025 SJSU STUDENT RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITY (RSCA) COMPETITION FINALISTS

These students and their research work will represent SJSU at the 39th Annual CSU Student Research Competition at California State Polytechnic University, Humboldt.

Aruna Gomathinayagam, '25, M.S. Biological Sciences, College of Science

Faculty mentor: Sonia Singhal, College of Science

Survival of Phi-6 Viral Strains in Acidic and Basic Environments

Ayane Gomi, '26, Mechanical Engineering, Charles W. Davidson College of Engineering

Faculty mentor: Christopher Smallwood, College of Science

Temperature-Dependent Optical Properties of Nano-scale Structured Materials

Dalia Cruz, '25, Forensic Science, College of Social Sciences

Faculty mentor:
Madalyn Radlauer, College of Science

Investigating Catecholase-Like Reactivity: Understanding Autoxidation's Contribution to Catalysis

Indranil Dutta, '25, MS Software Engineering, Charles W. Davidson College of Engineering

Faculty mentor:
Haonan Wang, Charles W. Davidson College of Engineering

Reconsidering the Principles of Image Steganography for Uncompromised Imperceptibility

Mariam Malik, '26, Psychology, College of Social Sciences

Leena Rehman, '28, Biological Sciences, College of Science

Mayra Cardenas Rojo, '25, MS Systems Physiology, College of Science

Sherry Tsai, '26, MS Biological Sciences, College of Science

Faculty mentor:
Katherine A. Wilkinson, College of Science

Muscle Spindle Afferents Transition from Rapidly Adapting to Slowly Adapting in Early Postnatal Development

Mehek Parghi, '25, Biological Sciences, College of Science

Husna Ibrahimkhail, '25, MS, Biological Sciences, College of Science

Faculty mentor:
Katherine A. Wilkinson, College of Science

Identification of a Potential Therapeutic Target to Prevent Chemotherapy-Induced Peripheral Neuropathy (CIPN)

Mizan Rupan-Tompkins, '28, Computer Science, College of Science, and Linguistics, College of Humanities and the Arts

Faculty mentor:
Behin Elahi, Charles W. Davidson College of Engineering

Enhancing Target Detection in Search and Rescue Operations Using Vision-Language Models

Nourdean Shraim, '25 BS, '26 MS Biomedical Engineering, Charles W. Davidson College of Engineering

Stephen Ball, '26, Chemistry, College of Science

Faculty mentor:
Andro Rios, College of Science

Life on Earth...From Space

Quoc Luong Huynh, '24, Statistics, College of Science

Faculty mentors:
Cristina Tortora, College of Science, and **Antonio Punzo**, University of Catania

Flexible Clustering on Mixed-type Data

Sean Chryz Iranzo, '25 BS, '26 MS Biomedical Engineering

Andy Perez, '25 BS, '26 MS Biomedical Engineering

Daniel Ramos, '25, Biomedical Engineering

Faculty mentor:
Melinda Simon, Charles W. Davidson College of Engineering

Design and 3D printing of Vascular Networks using a Diffusion-Based Strategy

SpartUp awardees are recognized on stage for their innovative ventures—part of the Office of Innovation's commitment to cultivating entrepreneurship at SJSU.

Office of Innovation

Offering Knowledge, Support, and Assistance to SJSU Entrepreneurs

Let's say you're an SJSU student, staff, or faculty member and you've developed a concept for a new kind of biomedical device, or perhaps an app for mobile devices, or an innovative service — something you believe could make a big difference in improving people's lives. You've done the research, created drawings, and even built a prototype. Now you need expert, real-world advice. Who do you turn to?

A good place to start is the SJSU Office of Innovation. Director Abby Queale works with Innovation Programs Facilitator Jalyn Pambid alongside flagship program SpartUp's Incubator Launch Director Michael "Mash" Ashley, Program Manager Eli Finn, and Ecosystem Manager Max Rothe to offer the knowledge, support and assistance SJSU students and faculty need to launch successful ventures.

"Our SpartUp mentorship program includes the participation of over 30 mentors available to all our SJSU entrepreneurs," Queale says. "This includes our own chapter of the Venture Mentoring Team, which includes vetted executives and entrepreneurs ready to offer real-world, business startup advice. Our SpartUp incubator has now grown to more than 1 thousand members going into just its third year."

Queale also points to the recently-launched SpartUp Proof of Concept Fund. It provides microgrants for SJSU entrepreneurs, so they can prototype their ideas and prepare them for product launch. This is an innovation office offering a full range of services to young entrepreneurs. SpartUp Proof Concept Fund alumni and Renix Co-Founder CEO Cythika Bopearachchi, '25 Biomedical Engineering, describe the program as "teaching founders to focus on the real-world value of their product, as well as the technology behind the product, thus launching you along a path of mastering entrepreneurship."

It's exactly what an entrepreneurial student might need to introduce a new product into the market!

Total number of members: **941**

New members in FY 2023-24: **519**

New Proof of Concept startups: **12**

Number of mentors: **35**

Amount of funding awarded to startups: $31,750

$30,000 in Proof of Concept program, and $1,750 via Pitch Jam.

as of June 30, 2024

Through SpartUp—an initiative of the Office of Innovation—SJSU entrepreneurs gain access to vital tools, expert networks, and real-world support to bring their ideas to life.

Have an entrepreneurial idea? *Register for upcoming SpartUp Incubator events and learn about the resources available to you.*

The Silicon Valley Small Business Development Center (SVSBDC) regularly hosts events to connect entrepreneurs with the resources necessary to successfully launch and manage their small businesses.

Silicon Valley Small Business Development Center

Helping Small Business Owners Turn Plans Into Reality

The world of business can be cruel and unforgiving – especially for someone coming from another country. You have to learn a new language, new customs and new ways of doing business; there's so much to learn and no margin for error. No one knows this better than Edgar Ceron, director of the Silicon Valley Small Business Development Center at San José State University.

He and his team help local entrepreneurs create successful small businesses. They offer free one-on-one planning, marketing and financing. He and his staff also have the expertise to go the extra mile when working with new business owners who happen to be from other countries because they understand both the business and cultural challenges these clients face.

Ceron points to a recent success story. "Nene Tesa Abloso is CEO of Rostenica Consulting Group LLC. He moved to the Bay Area from Ghana in Africa. His goal was to start a company with franchise, transport, sports and entertainment divisions. Tesa attended our 'Growth Profit Series' and worked with SBDC advisors to identify networking opportunities and potential partnerships."

"He did the hard work, secured a $55K loan, added a new location, hired new employees and increased sales by 23 percent. As a result of his hard work, Tesa generated a $52K increase in sales and a personal investment of $47K." This is another compelling success story for Ceron and his team, who know how to help clients overcome the unique challenges they may face.

SVSBDC workshops equip entrepreneurs with tools for strategic growth, access to capital, and practical business planning.

FY2023-2024 Impact

Capital Infused: $58M to 34 companies
SBIR Grants: $1.98M to 2 companies
Clients Served: 882
New Clients: 293
Mentors/Experts: 12
Counseling Hours: 3,224

***Become** a client or explore the services the Silicon Valley Small Business Development Center offers entrepreneurs.*

Commercialization Opportunities

Turning Breakthrough Research into Real-World Success

Sandeep Mukkamala and his colleagues in SJSU's Division of Research and Innovation's Office of Innovation are in the business of connecting the world of university research with the fast-moving world of commerce. They build bridges between the scientists doing the cutting-edge research of today with the entrepreneurs launching the breakthrough products and services of tomorrow.

Mukkamala is an intellectual property, IP, specialist within the Office of Innovation. His work involves providing advice, support, and guidance related to intellectual property. He files patent applications, registers trademarks, manages IP portfolios, and oversees copyright issues on behalf of university researchers. This is the world of product commercialization, also known as university technology transfer.

"Commercialization is the process of bringing new products, services, or technologies from the research lab to the marketplace," Mukkamala says. Insightfully, he offers a farming analogy to illustrate his point. "It's like planting a seed (the research idea), nurturing it (developing and refining the concept), and finally harvesting the fruit (a marketable product or service that benefits society)."

"At San José State University, we're committed to bridging the gap that exists between cutting-edge research and real-world applications. Our process of converting research findings into commercialization opportunities is a journey of innovation, collaboration, and strategic planning." Spoken very much like a dedicated IP specialist and a world-class expert in commercialization.

Is your RSCA ready to make an impact off campus? Contact Sandeep today at sandeep.mukkamala@sjsu.edu for more information!

Patents

Valuable Intellectual Property Protection for University Researchers

Imagine you're a university professor in chemical engineering and after years of intensive research, you've developed a breakthrough energy storage device. One that represents a critical advance in battery-power efficiency and storage in electric cars. Your first impulse might be to throw a party to celebrate. A natural response, but the smart thing to do is visit your local intellectual property (IP) specialist.

If you're a SJSU researcher, you'll find that expert at the Office of Innovation. The staff includes IP experts who can help you with your discovery.

"Intellectual property provides legal protection for products created. "Intellectual property covers what innovators create. This includes inventions, literary and artistic works, as well as, designs and business symbols." Patents, trademarks, and copyrights exist where research discovery meets legal protection. A patent is a kind of IP that grants exclusive rights to an inventor," Intellectual Property Specialist Sandeep Mukkamala from the SJSU Division of Research and Innovation adds.

Given the university's location in Silicon Valley, that makes for a steady stream of researchers who have done the hard work of new invention prototyping and testing. Moreover, they are now looking to transition their research idea into a product in the commercial marketplace. One that advances science and technology.

Learn more about the wide range of intellectual property (IP) support available to faculty, staff, and students.

Private sector partners, non-profits, and foundations seeking cutting-edge research expertise rely on the Industry Research Alliances team to connect them with SJSU faculty researchers who can drive innovation and technological advancements.

Industry Research Alliances

Bridging Academia and Industry

Industry Research Alliances promotes collaboration between faculty researchers and private companies to address real-world problems. These partnerships span a range of industries, from technology and healthcare to environmental science and manufacturing. For example, a local biotech company might request help developing new diagnostic tools, or a tech firm may seek expertise in data analytics to enhance its AI products.

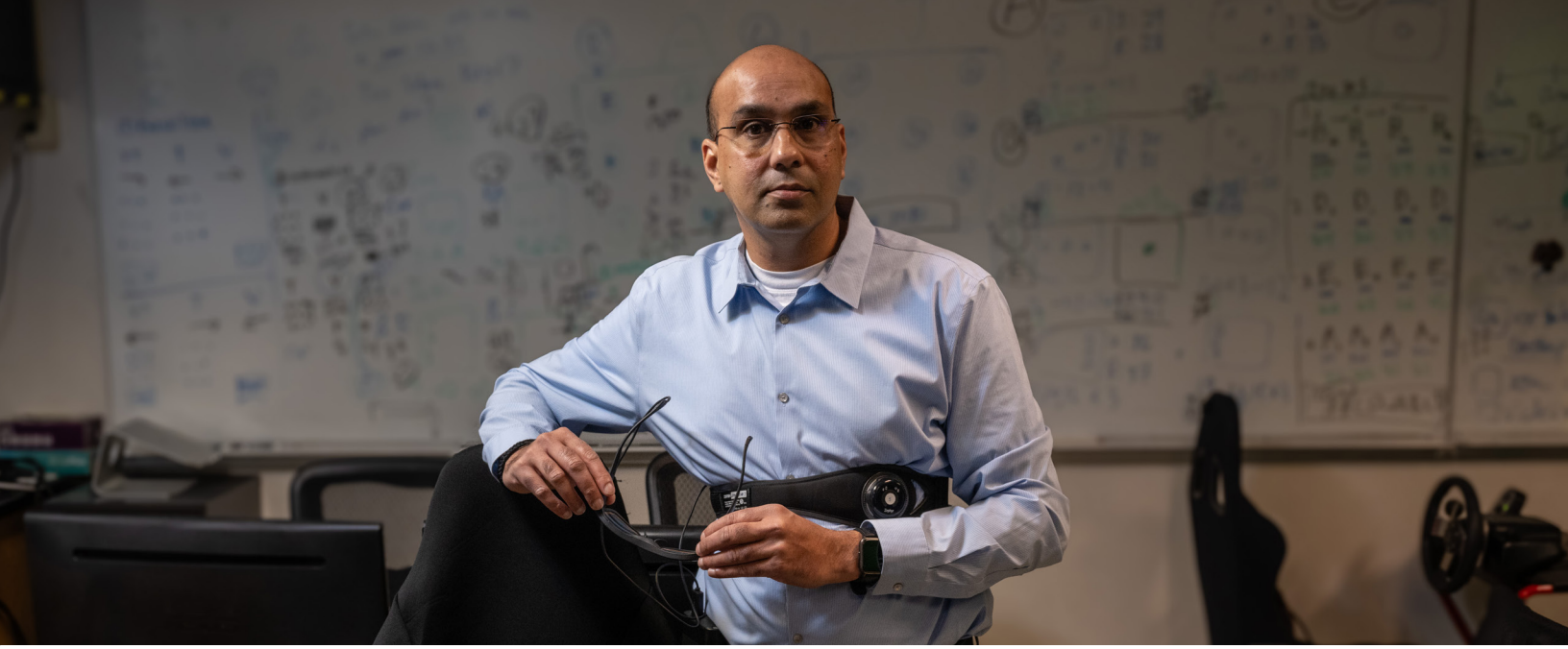
The process starts when a company approaches the university with a research problem: an issue to improve, a challenge to resolve, or a question needing thorough investigation. The Office of Innovation connects the company with the appropriate campus expert, and together, the Office of Innovation, the company, and the faculty researcher define short, intermediate, and long-term project goals and draft an agreement detailing each party's tasks, services, or products needed for collaborative research. This partnership results in deliverables and outcomes designed to meet project objectives and provide value to company stakeholders.

For researchers, these partnerships offer opportunities to apply academic knowledge to solve pressing industry challenges, while gaining additional access to external funding and resources. To delve deeper into the process, the Office of Innovation assists faculty researchers with 1:1 consultations, matchmaking to potential collaborators, navigating legal agreements, and managing relationships with our industry partners. Opportunities for joint proposal submissions or letters of support can also be explored with the Office of Research to gain access to federal funding sources. The SpartUp Incubator and the Silicon Valley Small Business Development Center can also help entrepreneurial faculty members explore options for spinning out a startup to leverage existing intellectual property from their research.

These collaborations benefit not only the companies and researchers involved, but they also contribute to societal advancement by driving innovation in key sectors. Industry-sponsored research strengthens our innovation system by enabling new discoveries and addressing real-world needs — making it a win-win venture for all!

Connect *with the Industry Research Alliances team and see how they link industry and non-profits with expert researchers.*

Members of the Office of Innovation tour the facilities of an industry partner, strengthening campus–industry connections through hands-on collaboration.



Professor Anil R. Kumar, from the Department of Industrial and Systems Engineering in the Charles W. Davidson College of Engineering,—donning some of the equipment his lab group uses to measure breathing, heart rate, and eye movement—is the 2024 Industry-Sponsored Researcher Award recipient whose research focuses on human factors and ergonomic design to improve safety confidence in self-driving vehicles.

Anil R. Kumar, 2024 Industry-Sponsored Research Award

Self-Driving Vehicles: Enhancing Safety Confidence Through the Integration of Human Factors and Ergonomic Design

Professor of Industrial and Systems Engineering Anil R. Kumar, in the Charles W. Davidson College of Engineering, is receiving the 2024 Industry-Sponsored Researcher Award in recognition of his industry-sponsored research accomplishments in the field of human factors and ergonomic design for autonomous vehicles. His work aims to address a fundamental challenge in self-driving technology: How can we design autonomous vehicles in a way that fosters trust and a sense of security for passengers across multiple modes of automated mobility?

Consider this scenario: you hired a self-driving taxi and this vehicle has a voice assistant that communicates with you select proactive driving maneuvers that the driver support system undertakes. This raises a huge question for designers: How to make the user feel during this time? How do you design features that will make the users satisfied, fulfilled and trust the interaction of the vehicle?

Luckily for those skeptical about using these features, there are SJSU researchers working on this design and ergonomics challenge. One of those researchers is Professor Anil R. Kumar. His work explores the human factors related to autonomous vehicles, offering ways to improve the self-driving vehicle experience so that it inspires human confidence, safety, and control.

"The advent of automated vehicles will transform society in many ways with increased human, robot, and automated vehicle interactions," says Professor Kumar. "Humans and automated mobility technologies must coordinate well in future hybrid mobility society. It is vital that we understand how these interactions contribute to everyone's well-being. The current research examines the factors that influence well-being in this mobility context, like positive emotion, satisfaction, fulfillment, and trust."

Teacher and student collaboration is a big part of Professor Kumar's project. "Our students assisted in the experimental design and setup, tested the data collected, and contributed to the final analysis," he says, "and some students worked on a write-up of a conference paper produced." There you have it: a faculty and student collaboration designed to help make future self-driving vehicles feel safer and more intuitive for their human passengers.

It's faculty-student collaborations such as this that exemplify the qualities of an Industry-Sponsored Research Award recipient.

Professor Kumar employs specialized instruments to measure human responses—such as breathing, heart rate, and eye movement—to stimuli encountered while driving or interacting with autonomous vehicles.

***Learn more** about the Human Factors Engineering Laboratory in the Charles W. Davidson College of Engineering.*

Research funding brought to SJSU

Award(s): $1,967,079
as of March 14, 2025

Assistant Professor of Sociology and Asian American Studies Saugher Nojan, in the College of Social Sciences, is a recipient of the 2024 Early Career Investigator Award for her exceptional research achievements and successful grant awards.

Saugher Nojan 2024 Early Career Investigator Award

A Rising Research Leader with National Recognition

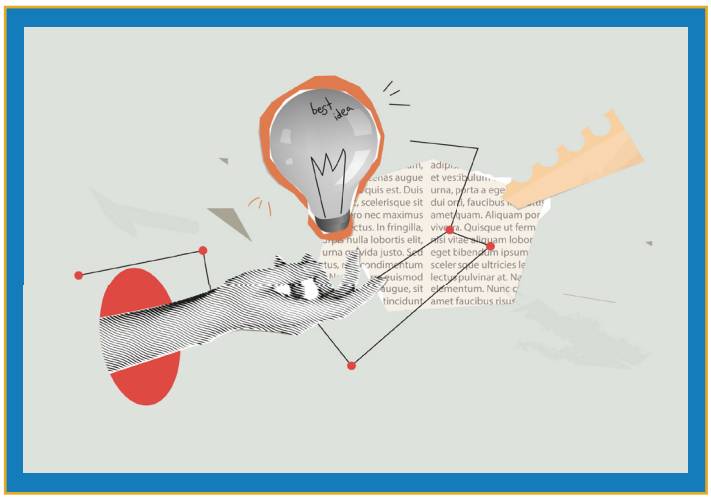
Assistant Professor of Sociology and Asian American Studies Saugher Nojan, in the College of Social Sciences, is one of two recipients of the 2024 Early Career Investigator Award. The recognition honors tenure-track faculty who have demonstrated exceptional achievement in research, scholarship, or creative activity during their probationary period at San José State University.

Since joining the university in Fall 2021, Professor Nojan has secured more than $300,000 in external research funding from prestigious organizations such as the National Endowment for the Humanities, the American Council of Learned Societies, and the Mozilla Foundation. Her work spans multi-year, interdisciplinary projects, and reflects an ability to engage with complex social questions at both local and national levels.

Professor Nojan has published seven peer-reviewed articles to date — five of them in respected academic journals while at SJSU. Her research contributions have been recognized by her peers, and her work continues to gain visibility within scholarly communities across the country.

Her research program has also served as a training ground for undergraduate and graduate students alike, providing hands-on research opportunities that enhance their academic experience and professional readiness. Her research enhances the campus experience for students while also strengthening her communities. Through collaborative research and the direct application of her findings, she creates meaningful and lasting impact.

With a growing portfolio of publications, competitive grant awards, and student mentorship, Professor Nojan exemplifies what it means to be a scholar deeply engaged in advancing knowledge. Her trajectory reflects both individual excellence and a strong commitment to research-driven impact.



Research funding brought to SJSU

Award(s): $303,054
as of March 14, 2025

***Learn more** about Dr. Nojan's work and the College of Social Sciences at San José State University.*

Assistant Professor Gaojian Huang, Department of Industrial and Systems Engineering, Charles W. Davidson College of Engineering, is a recipient of the 2024 Early Career Investigator Award. His research focuses on developing AI-driven systems that enhance intelligent mobility and support users with diverse needs.

Gaojian Huang
2024 Early Career Investigator Award

Creating AI-Driven Systems to Enhance Intelligent Mobility and Help People in Need

Assistant Professor of Industrial and Systems Engineering Gaojian Huang in the Charles W. Davidson College of Engineering is receiving the 2024 Early Career Investigator Award in recognition of his outstanding research accomplishments during his tenure at SJSU. His work focuses on developing AI-driven systems that enhance intelligent mobility and improve accessibility for individuals with diverse needs. By designing human-machine-AI systems that adapt to different users, Professor Huang aims to make technology safer, more inclusive, and more intuitive for all.

With all the heated discussion in the news and social media about the benefits versus the risks of artificial intelligence, it's important to remember that there are dedicated engineers and educators working to design safe AI applications to serve individuals. Professor Gaojian Huang is one such individual.

This is how Professor Huang describes his role and work. "I am the director of the Behavior, Accessibility, and Technology (BAT) Lab. The mission of the Lab is to develop next-generation human-machine-AI systems, which assist and support humans with technology in a wide range of application domains to enhance and optimize human performance, as well as well-being."

Lofty words at first glance, but Professor Huang and his team are focused on creating real-life, on-the-ground applications. "My research focuses on creating AI-driven systems, especially in intelligent mobility (such as self-driving cars), that adapt to different user needs and abilities," he says. "These types of systems make technology more accessible and safer for everyone. I also collaborate on designing systems that support older adults and individuals with disabilities, helping them navigate technology more comfortably."

A driving simulation system in Assistant Professors Gaojian Huang's lab at the Charles W. Davidson College of Engineering.

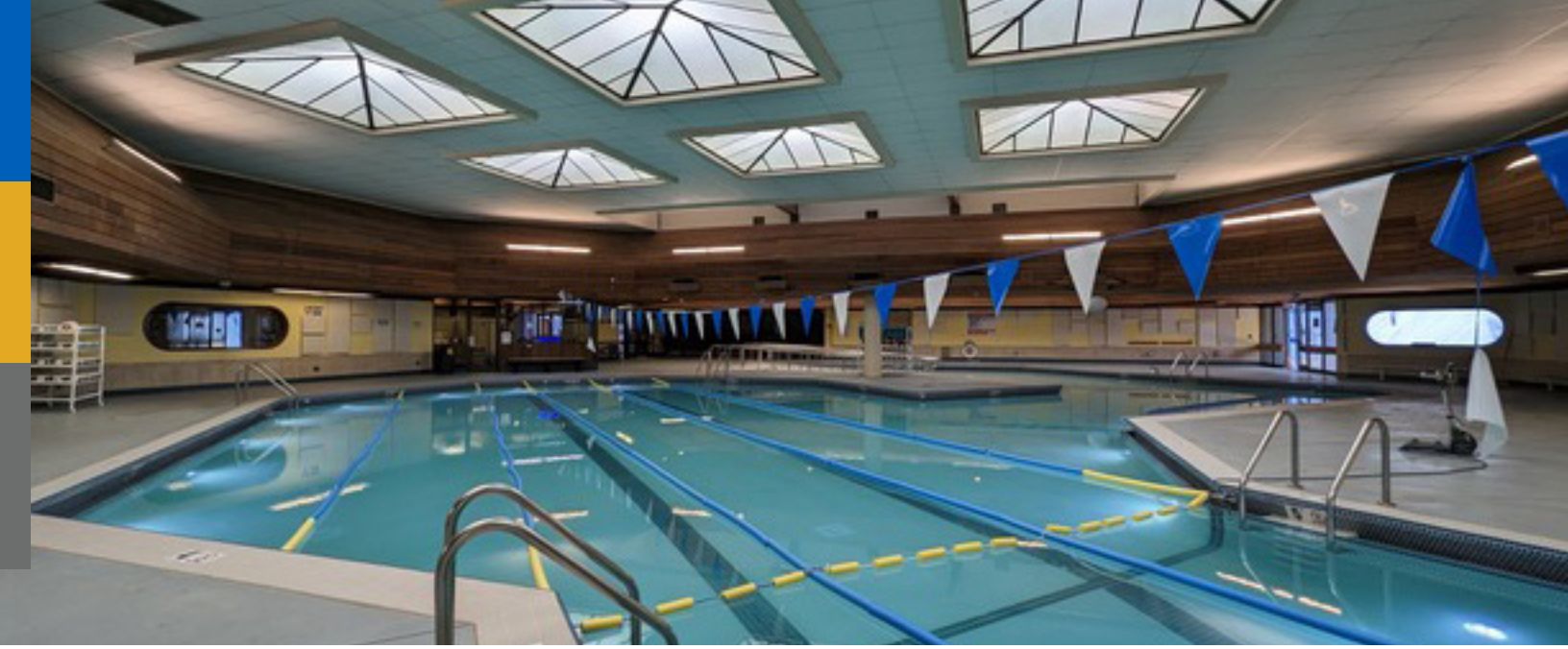
Professor Huang also points to the large contribution made by SJSU students in the BAT Lab. "My research program benefits from their creativity, diverse perspectives, and commitment," he says. "Student participation advances human-centered AI solutions, enriches student training, and forges a pipeline of skilled professionals and scholars whose contributions shape our ongoing work."

These are empowering words from an engineer dedicated to transforming AI into a trusted partner, while dispelling fear and building confidence in the world of technology.

***Learn about** Dr. Huang's Behavior, Accessibility, and Technology (BAT) Lab.*

Research funding brought to SJSU

Award(s): $467,200
as of March 14, 2025



The Timpany Center's accessible pool is part of a comprehensive wellness facility offering both aquatic and land-based exercise classes and equipment, serving the diverse fitness and therapeutic needs of the San José community.

The Timpany Center

Offering Fitness, Recreation and Wellness for the San José Community

Timpany Center Program and Operations Director Dr. Jennifer Schachner and her devoted team believe in the power of therapeutic exercise and recreation to improve the health and well-being of seniors in the San José community. They see the positive results every day on the faces of visitors to the Timpany Center.

"As a student at SJSU in the Kinesiology Department, I saw how exercise, fitness and wellness eased some of the effects that aging has on the human body and increases quality of life," Schachner says. "Today, we have expanded our programs to include experiences for all age groups."

The center opened in 1979 and was originally designed to serve children with disabilities. Now it serves a wide spectrum of community members through an enduring partnership between San José State University Research Foundation and Santa Clara County.

"Visit our center on any given day and you'll see certified instructors conducting fitness classes, teaching kids how to swim and working with seniors to do physical therapy exercises that lessen the severe impacts of arthritis on their daily routines," she adds.

And the reward for Dr. Schachner and her team? Smiles on the faces of kids from the barrio who are learning how to swim for the first time and nods of appreciation from the seniors leaving after therapeutic sessions because they are learning valuable techniques to improve the quality of their daily lives.

The Timpany Center, a nonprofit partnership with Santa Clara County and SJSU, offers inclusive fitness programs and a newly renovated pool for people of all abilities.

Monthly attendance: 300 members plus 100–200 visitors
Staff: 5 full-time, 35 part-time
Weekly classes: 40 land and water-based classes
Average class size: 17
Most popular classes: Land and water-based programs for joint health
Equipment: 14 cardio, 8 strength, 5 accessible machines, plus bands, weights, and mats

***Check out** the fitness and aquatics classes offered by the Timpany Center.*

STATEMENT OF ACTIVITIES

FISCAL YEAR ENDING JUNE 30, 2024

REVENUE AND SUPPORT

Federal Contracts and Grants
$32,000,586

State contracts and Grants
$11,689,499

Other Contracts and Grants
$8,415,525

Indirect Cost Recovery - C&G Other Revenue and Support
$10,580,556

Other Revenue and Support
$10,345,776

In-Kind Donations
$1,694,924

Total Revenue
$74,726,866

EXPENSES

Sponsored Programs
$50,318,585

Board Designated Programs
$431,225

Campus Organizations Activities
$5,638,847

Support Activities - Management and General
$11,267,391

Transfers to SJSU and Tower Foundation
$500,000

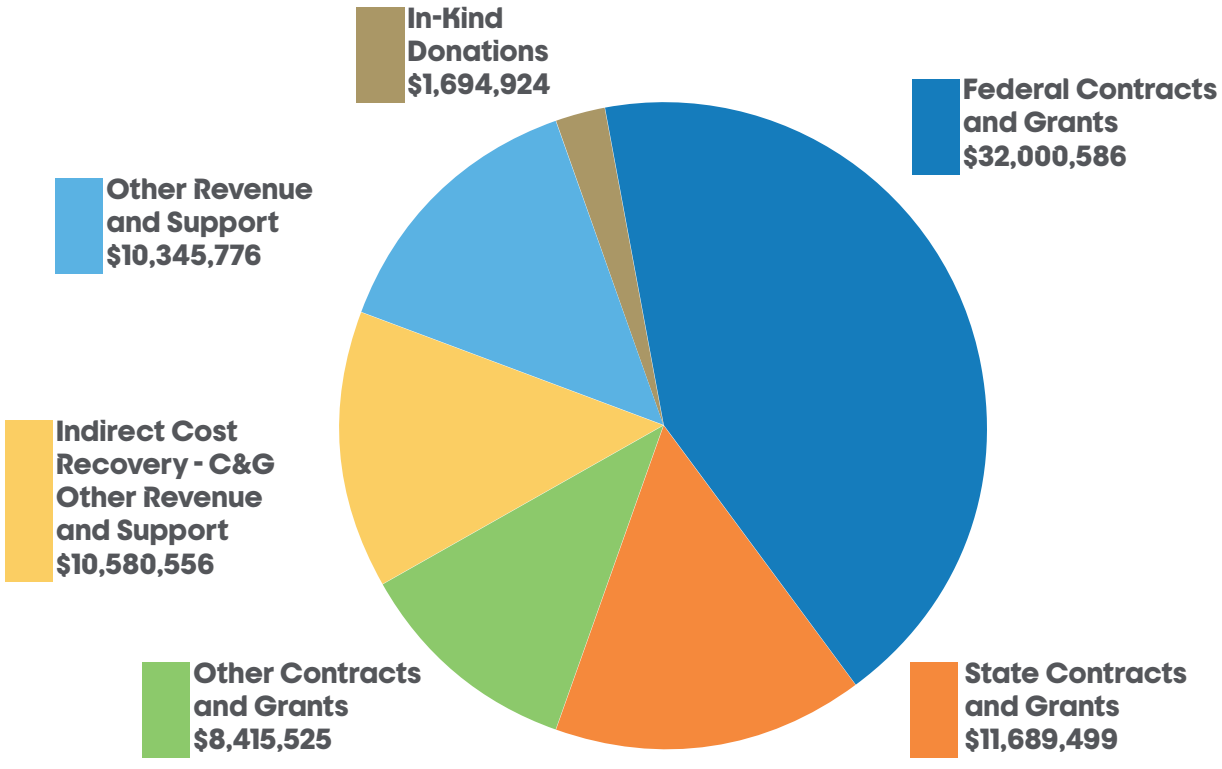
Total Expenses
$68,156,049

CHANGE IN NET POSITION
$6,570,817

Net Position at beginning of Year
$17,317,818

Net Position at end of Year
$23,888,635

Types of Revenue and Support



FISCAL YEAR 2023-2024
CONTRACTS, GRANTS, AND FELLOWSHIPS

Charles W. Davidson College of Engineering

Dean's Office

Sheryl Ehrman
CoGenerate Encore Fellowship
CoGenerate
$25,000

Nicole Okamoto, Mathew Stowe
MESA Engineering Program (MEP) - Academic Year 2023-2024
Regents of the University of California
$80,000

Xiao Su
Longevity, Equity, and Aging Research Network (L.E.A.R.N) Institute
Stanford University
$15,513

Department of Aerospace Engineering

Maria Chierichetti
Design of a SADA for Interplanetary Cubesats
California Space Grant Consortium
$9,200

Nikos Mourtos
ATOM Business Office Admin. Assistant
Jacobs Technology, Inc.
$17,390

Periklis Papadopoulos, Maria Chierichetti
Axient Internship Program
Axient LLC
$130,691

Department of Biomedical Engineering

Patrick Jurney
Reactive Ion Plasma Treatment of Cardiovascular Biomaterials to Understand the Effect of Nanotopography on Endothelialization
National Institutes of Health
$146,500

Department of Chemical and Materials Engineering

Katy Kao
Adaptive Evolution of Candida Biofilms
National Institutes of Health
$146,500

Dahyun Oh
Center for High Precision Patterning Science (CHiPPS)
Lawrence Berkeley National Laboratory
$121,000

Dahyun Oh, Christopher Smallwood, Abraham Wolcott, Ozgur Keles
MRI Track #1 Acquisition of Tip-Enhanced Raman Spectroscopy for Research and Education at San José State University
National Science Foundation
$550,000

Michael Oye
Community Services Program '23 - '24
City of San José
$100,000

Department of Computer Engineering

Gheorghi Guzun
CAREER: Scalable and Adaptable Sparsity-Driven Methods for More Efficient AI Systems
National Science Foundation
$104,778

Jorjeta Jetcheva, Carlos Rojas, Brianne Gutmann, William Andreopoulos
S-STEM: Empowering Low-Income Students to Succeed in Engineering and Computer Science
National Science Foundation
$2,499,411

Ronald Mak
Confidential
$157,608

Younghee Park, Fabio Di Troia
REU Site: Undergraduate Research Experience for Underrepresented Groups to Learn Emerging Topics in Cybersecurity
National Science Foundation
$16,000

Department of Electrical Engineering

Shrikant Jadhav
An HPC Platform for Real-Time Environment Monitoring Using Machine Learning
Savannah River National Laboratory
$350,000

Hiu-Yung Wong
Cryogenic Characterization and Modeling of MST Devices and Analog Circuits Augmented with TCAD-enabled Machine Learning
Atomera
$100,195

Department of Industrial and Systems Engineering

Anil R. Kumar
Confidential
$74,283

Respiratory Protection for Wildland Firefighters
University of California, Los Angeles
$169,879

Hongrui Liu
Proposal to Test/Research Market Clearing Systems For ISO New England
ISO New England
$25,000

Department of Mechanical Engineering

Saeid Bashash
Second-Life Battery Microgrid Demonstration Enabled by Advanced State of Health Tracking
RePurpose Energy, Inc.
$315,274

Farzan Kazemifar, Crystal Han, Saeid Bashash
Industrial Assessment Centers - Regional Centers of Excellence
San Francisco State University
$750,000

Ali Tohidi
EAGER: Understanding Complex Wind-Driven Wildfire Propagation Patterns with a Dynamical Systems Approach
University of Utah
$11,456

College of Health and Human Sciences

Dean's Office

Laurie Drabble
A Unified Protocol to Address Sexual Minority Women's Minority Stress, Mental Health and Hazardous Drinking
Yale University
$21,645

Health Effects of Intersectional Stigma Among Sexual Minority Women
University of California, Santa Barbara
$20,782

Rainbow SCOTS (Sober Curiosity Study)
Columbia University
$2,750

What Makes Sexual Minority Women "Sober Curious"? Barriers and Facilitators to Reducing Harmful Drinking Patterns
Columbia University
$2,500

Joe Grzywacz
Integrative Pathways to Health and Illness
University of Wisconsin, Madison
$64,246

Joe Grzywacz, Audrey Shillington
Broaden and Build the Northern CA Health Care Workforce
California Department of Health Care Access and Information
$3,394,179

Department of Kinesiology

Areum Jensen
The Role of Sympathetic Nervous System Activity on Blood Pressure Regulation in Individuals with Autism Spectrum Disorder
National Institutes of Health
$144,159

Jennifer Schachner
Older Americans Act Funding- Sourcewise -Timpany Center- San José State University Research Foundation
Sourcewise
$55,102

Title III-D Evidence Based Health Promotion
Sourcewise
$38,370

Department of Nutrition, Food Science, and Packaging

John Gieng
Farm-to-Table Nutrition Study
Blue Hill Farm
$4,470

Adrianne Widaman
Tele-Nutrition to Improve Cardiometabolic Health and Quality of Life Among Individuals with Spinal Cord Injury Project
Santa Clara County
$23,911

Mi Zhou
Recovery Pending Revolution: Youth Artists of Color as Agents of Recovery and Readiness
University of California, San Francisco
$31,176

Department of Public Health and Recreation

Chulwoo Park
Language Identity and Mental Health Disparities among Multilingual 1.5 Generation Asian/Asian American Immigrant Young Adults: A Mixed Methods Study
National Institutes of Health
$366,250

Miranda Worthen, Soma de Bourbon
CIVIC-FA Track B: Participatory Action Research to Enhance Equity and Prevent Moral Injury in Community Paramedicine
National Science Foundation
$1,000,000

School of Social Work

Moctezuma García
Unidos en Salud: Multi-Disease HIV Testing Hubs for Latinx Immigrant Communities in San Francisco
University of California, San Francisco
$41,993

Project COMPA (Comunidades Ofreciendo Más Prevenciones Agradables)
Regents of the University of California
$336,999

Peter Lee
BHWET Integrated Behavioral Health MSW Stipend Program
University of California, Berkeley
$76,200

FY 2125 Adult Protective Services Training Program
University of California, Berkeley
$136,875

FY2327 Public Behavioral Health MSW Training and Fellowship Program
University of California, Berkeley
$383,250

Mental Health Service Professional Demonstration Grant Program
Santa Clara Co Office of Ed
$707,200

Title IV-E Child Welfare Training 2023-2024
University of California, Berkeley
$1,812,160

College of Humanities and the Arts

Dean's Office

Chris Burrill
City of San José Based Small and Mid-Size Arts Organization Facility Rental Grant
City of San José
$25,000

Shannon Miller, Ann Agee, Christina Mune
Grounding the Digital Humanities at San José State University
National Endowment for the Humanities
$157,480

Department of Art and Art History

Rhonda Holberton, Barbara Hughes
Bay Area California Arts Project (BayCAP)
Regents of the University of California
$40,000

Department of English and Comparative Literature

Katherine Harris
Public Art as Resistance in San José: Walking Tour
City of San José
$10,000

Bronwyn Lamay
San Jose Area Writing Project 2023-2024 - Federal
Regents of the University of California
$39,089

CONTRACTS, GRANTS, AND FELLOWSHIPS

Bronwyn Lamay, Scott Jarvie
San Jose Area Writing Project 2022-2023 - State
Regents of the University of California
$36,506

School of Journal and Mass Communication

Tina Korani
International Mother Language Celebration
City of San José
$5,318

College of Information, Data, and Society

School of Information

Anthony Chow, Jose Aguinaga

iLead: Preparing Tomorrow's Library Leaders
Institute of Museum and Library Services
$146,770

Darra Hofman, Nada Attar, Souvick Ghosh, Saugher Nojan
Cross-Campus Interdisciplinary Responsible Computing Learning Experiences
Mozilla Foundation
$150,000

College of Science

Dean's Office

Shelley Cargill
MESA College Prep Program AY 2023-2024
Regents of the University of California
$290,000

SJSU MESA College Prep Program - The Foundation for Hispanic Education 22-25
Foundation for Hispanic Education
$11,258

SJSU MESA Schools Program ARUESD Agreement
Alum Rock Unified Elementary School District
$56,813

SJSU MESA Schools Program ESUHSD Agreement
East Side Union High School District
$109,888

SJSU MESA Schools Program - Bridges Academy (of Franklin McKinley School District)
Franklin-McKinley School District
$10,465

Shelley Cargill, Susan Arias
MESA College Prep Program University Preparatory Academy Agreement 23-24
University Preparatory Academy
$5,360

Michael Kaufman
Astronomical Infrared Bands as Calibrated Probes of Astrophysical Conditions in the JWST-era with The NASA Ames PAH IR Spectroscopic Database
National Aeronautics and Space Administration
$39,319

Department of Biological Sciences

Walter Adams
Mechanism of Toxin Mediated Damage to the Lung Epithelium during S. Pneumoniae Infection
National Institutes of Health
$146,500

Maya deVries, Michael Graham, Scott Hamilton, Luke Gardner
Aquanauts: A Transformative Research and Training Experience for Undergraduates in Shellfish Aquaculture
University of California, San Diego
$3,223

Bree Grillo-Hill
Increased Intracellular pH Promotes Cancer Cell Behaviors
National Institutes of Health
$146,500

Fredrick Larabee
Modernization and Digitization of the J. Gordon Edwards Entomology Museum
California Institute for Biodiversity
$24,999

Cleber Ouverney, Alberto Rascon Jr.
U-RISE Program at San José State University
National Institutes of Health
$271,970

Alexander Payumo
Neurohumoral Interactions Coordinating Mammalian Cardiomyocyte Size and Proliferation
National Institutes of Health
$183,125

Julio Soto
IPA
IPA
$256,467

Miri VanHoven
The Effect of Sleep on Neural Circuit Connections
University of California, San Francisco
$169,493

Kate Wilkin
SJSU Prescribed Fire Monitoring and Research Program in the South Bay and Central Coast
California Department of Forestry and Fire Protection
$80,000

Katherine Wilkinson
Molecular Mediators of Muscle Spindle Mechanosensation
National Institutes of Health
$146,500

Department of Chemistry

Philip Dirlam
Broadening Accessibility and Training To Emerging Researchers for Innovative Energy Storage (BATTERIES)
California State University, Chico
$187,500

Nicholas Esker
Multidisciplinary Training Experience in Nuclear Science "Mt. ENS"
United States Department of Energy
$104,553

RUI: Targetry Development and Nuclear Structure Studies Near 100Sn
National Science Foundation
$158,148

Gianmarc Grazioli
Probing Amyloid Fibril Self-Assembly with Network Hamiltonian Simulations in Explicit Space
National Institutes of Health
$168,818

Laura Miller Conrad
Blocking Cationic Antimicrobial Peptide-Resistance in Pseudomonas Aeruginosa
National Institutes of Health
$109,875

Andro Rios
Astrobiology Scholars Program an Immersive Research Experience (ASPIRE)
National Aeronautics and Space Administration
$166,891

Karen Singmaster
CSU SJSU LSAMP Program 2018-2024
California State University, Sacramento
$60,000

Annalise Van Wyngarden
Nuclear Chemistry Summer School (NCSS)
City University of New York
$256,577

Ningkun Wang
Circular Dichroism Spectrophotometer
National Institutes of Health
$186,411

Elucidating the Mechanism for Allosteric Regulation of SIRT1 through the N-Terminal Region
National Institutes of Health
$146,500

Abraham Wolcott
Supporting Active Learning in Introductory STEM Courses with ExtendedReality
California State University, Fresno
$9,000

Department of Computer Science

Faranak Abri
Collaborative Research: SaTC: CORE: Medium: Analytical Models for Conversational Social Engineering Attacks
National Science Foundation
$200,000

Melody Moh, Xiao Su
SWAT: Cybersecurity Regional Alliances and Multistakeholder Partnerships Pilot Program
San José State University
$1,000,000

Department of Mathematics and Statistics

Ferdinand Rivera, Yingjie Liu, Plamen Koev, Daniel T Brinkman
Developing Virtual Reality-Mediated Representational Tools for Supporting and Enhancing Deep Mathematical Thinking of Linear Algebra Relationship
National Science Foundation
$399,984

Ferdinand Rivera, Peter Gao
Understanding Teacher Effectiveness and Retention Among Single Subject Math Program Completers in the First Five Years of Teaching (Project CSU TEAR)
National Science Foundation
$984,603

Julie Spitzer, Joanne Becker, Suzanne Damm
Santa Clara Valley Mathematics Project FY 23-24 (CSMP State Funds)
Regents of the University of California
$20,000

Santa Clara Valley Mathematics Project 23-24 (ESSA federal funds)
Regents of the University of California
$24,223

Yan Zhang, Tahir Issa, Dashiell Fryer
Anti-Censorship Resistance in the Ethereum Blockchain
Ethereum Foundation
$50,000

Department of Meteorology and Climate Science

Craig Clements
A Multiscale Study of the Coupling Between Flow, Fire and Vegetation - Influence of Vegetation Distribution and Flow on Fire Behavior and Plume Development
Worcester Polytechnic Institute
$150,000

Active Fire Monitoring during FireSense using the SWIS Sensing Package
National Aeronautics and Space Administration
$159,555

Center: Addition of WPI as a Partner Site to WIRC
Worcester Polytechnic Institute
$85,900

METOPS - Analyze 30 YR Climatology 2KM WRF Model (2047625)
Pacific Gas and Electric Company
$285,000

Craig Clements, Amanda Stasiewicz, Adam Kochanski, Kate Wilkin
IUCRC Phase I: San José State University: Wildfire Interdisciplinary Research Center (WIRC)
National Science Foundation
$205,995

Minghui Diao
Aerosol Indirect Effects on Cirrus Clouds Based on NASA Flight Campaigns and Global Climate Models
National Aeronautics and Space Administration
$182,433

California Community and Earth-system Integrated Climate Resilience Center (CalCEI CRC)
United States Department of Energy
$323,061

Adam Kochanski
Coupled Interactive Forecasting of Weather, Fire Behavior, and Smoke Impact for Improved Wildland Fire Decision Making
Colorado State University
$24,501

Datasets of Dead Fuel Moisture for California
Lawrence Livermore National Laboratory
$50,546

Distributed Spacecraft with Heuristic Intelligence to Monitor Wildfire Spread for Responsive Control
Bay Area Environmental Research Institute
$377,547

Integration and Evaluation of WRF-SFIRE Application for Interoperability in Wildfire Decision Making
Colorado State University
$21,477

Predictive Physics-Based Modeling Framework For Biomass Combustions in Wildfire Conditions
Lawrence Livermore National Laboratory
$60,406

Technology Development to Integrate Innovative Observation Capabilities into Coupled Wildfire Models for Improved Active Fire Forecasting
Colorado State University
$336,344

Towards a NU-WRF based Mega Wildfire Digital Twin: Smoke Transport Impact Scenarios on Air Quality, Cardiopulmonary Disease and Regional Deforestation
University of Maryland Baltimore County
$67,123

Adam Kochanski, Craig Clements
Evaluating and Improving Live and Dead Fuel Moisture Models for Use in Gridded Forecast Systems
United States Forest Service
$230,195

Measuring and Modeling Smoke Plumes and Emissions based on Aggregated, Object-based Fuel Structures
United States Forest Service
$71,670

CONTRACTS, GRANTS, AND FELLOWSHIPS

Qian Tan

The NOAA Cooperative Science Center in Atmospheric Sciences and Meteorology

Howard University

$30,000

Department of Geology

Kimberly Blisniuk

Development of Faults through Sand and the Slip History of the San Gregorio Fault

United States Department of the Interior

$77,128

Elizabeth Madden

Quantifying Fault Slip Partitioning between the Calaveras and Hayward Faults, CA

University of Southern California

$37,772

Department of Physics and Astronomy

Curtis Asplund, Younghee Park

USC-SJSU ICCAE Consortium's National Security and Intelligence Scholars Research Program

University of Southern California

$25,000

Kassahun Betre, Curtis Asplund

A Transformative Master's Program in High Energy Physics

United States Department of Energy

$325,000

Alejandro Garcia

Stochastic and Hybrid Models and Algorithms for Fluids

Lawrence Berkeley National Laboratory

$134,917

Ehsan Khatami

AI and Data Science Enabled Predictive Modeling of Collective Phenomena in Strongly Correlated Quantum Materials

University of Tennessee

$89,062

Cassandra Paul, Tammie Visintainer, Marcos Pizarro, Katherine Wilkinson

Transforming Undergraduate Teaching and Learning Through Culturally Sustaining, Active, and Asset-Based Approaches to Introductory Science Courses

National Science Foundation

$208,557

Gina Quan, Brianne Gutmann

Collaborative Research: Evaluating Access: How a Multi-Institutional Network Promotes Equity and Cultural Change Through Expanding Student Voice

National Science Foundation

$18,020

Aaron Romanowsky

RUI: Unlocking the Origins of Ultra-Diffuse Galaxies

National Science Foundation

$378,953

Moss Landing Marine Laboratories

Holly Bowers

Validating the Aqusens Imaging Platform to Expand Networked Cell Detection Capabilities

United States Department of Commerce

$451,462

Dustin Carroll

A Catchment to Coast Paradigm: Impact of Spatially and Temporally Varying Nutrient and Freshwater Fluxes on the Gulf of Mexico Dead Zone

National Aeronautics and Space Administration

$15,216

A Multipronged Approach to Investigate How Hydrography and Mixing Shape Productive Fjord Ecosystems in Greenland

National Science Foundation

$78,440

Analysis of the Role of Diel Vertical Migrators in the Marine Biological Pump

Brown University

$49,837

Closing the Carbon Cycle Loop: Quantifying Land-to-Sea Carbon Fluxes

National Aeronautics and Space Administration

$98,935

ECCO-Darwin Model Exploration of Physical and Biogeochemical Interactions in the Land-Sea Continuum

Jet Propulsion Laboratory

$120,000

Estimating the Circulation and Climate of the Ocean (ECCO)

Jet Propulsion Laboratory

$12,393

Ocean Carbon Sink Variability: Internal vs. Forced Mechanisms

Columbia University

$33,870

NSF GEO-NERC: Collaborative Research: Exploring AMOC Controls on the North Atlantic Carbon Sink Using Novel Inverse and Data-Constrained Models

National Science Foundation

$184,955

Using a Data-Constrained Global-Ocean Ecology and Biogeochemistry Model to Study the Role of Biological Pump and Ocean Circulation in Driving Ocean...

National Aeronautics and Space Administration

$23,923

Thomas Connolly

Synchro: Co-Design Lab for Synchronizing Technology Evolution for Industry, Ocean Science and Conservation

Monterey Bay Aquarium Research Institute

$30,000

Understanding the Physical Processes Above and Below the Air-Sea Interface

Naval Postgraduate School

$40,000

Thomas Connolly, Maxime Grand, Holly Bowers

CeNCOOS Partnership: Information Solutions to Power Healthy and Prosperous Oceanic, Coastal and Estuarine Communities

Monterey Bay Aquarium Research Institute

$5,000

Luke Gardner

Elkhorn Slough Foundation Subaward: Enhancing Climate Resilience through Coastal Ecosystem Restoration in Elkhorn Slough

Elkhorn Slough Foundation

$147,501

Western Regional Aquaculture Center-33rd Annual Work Plan FY 22

University of Washington

$78,838

Michael Graham, Scott Hamilton

Universal Hatchery System for Developing New Seaweed Strains for Land-Based Aquaculture Production

University of California, San Diego

$111,378

Scott Hamilton
California Collaborative Fisheries Research Program - Monitoring and Evaluation of California Marine Protected Areas
California Ocean Protection Council
$1,949,999

California Collaborative Fisheries Research Program - Monitoring and Evaluation of California Marine Protected Areas
San José State University
$1,080,000

Evaluating the Performance of California's MPA Network through the Lens of Sandy Beach and Surf Zone Ecosystems
University of California, Santa Barbara
$157,188

Restoring Kelp Forest Habitat in the Greater Farallones National Marine Sanctuary
Greater Farallones Association
$132,218

Validating Age and Growth of Captive Fishes from Mexican Waters at the Monterey Bay Aquarium
Monterey Bay Aquarium
$10,000

James Harvey
Estuarine Wetland and Nearshore Ecology Studies along the Pacific Flyway
United States Geological Survey
$79,000

Marine Mammal Observer Training
Monterey Bay Aquarium Research Institute
$5,618

Suisun Marsh Waterfowl Science Investigations: Data Synthesis and Manuscript Preparation
United States Geological Survey
$135,000

James Harvey, Scott Benson
Contract for Services to Support Leatherback Monitoring
Upwell Turtles
$119,500

Wesley Heim, Marco Sigala, Ross Clark
SWRCB-SWAMP Agreement Number 20-006-270
California State Water Resources Control Board
$687,628

Deborah Maloney
NSF Graduate Research Fellowship
National Science Foundation
$49,000

Birgitte McDonald
Basic Stranding Response: Involving Undergraduates to Train the Next Generation of Marine Mammal Stranding Responders
University of California, Santa Cruz
$20,313

California Marine Mammal Stranding Network 2022-2023 (one-time allocation)
Marine Mammal Center
$264,871

Kevin O'Connor
Estuary MPA Monitoring (Round 2)
California Ocean Protection Council
$749,999

Federally Listed Species Recovery and Dune Habitat Restoration and Monitoring, Naval Support Activity Monterey, Monterey, California
California State University, Monterey Bay
$83,000

Monterey Bay Living Shoreline Program (Round 1)
California Marine Sanctuary Foundation
$191,000

Multi-Benefit Water Quality Enhancement Projects in the Salinas Valley
California Marine Sanctuary Foundation
$450,000

Kevin O'Connor, Ivano Aiello
MRN-1 Bolinas Lagoon Sea Level Rise Adaptation Planning Study
California Department of Transportation
$679,686

Mara Orescanin
Estuary Inlet Evolution and Dynamics - Year 2 Amendment
University of California, San Diego
$17,367

Jonathan Prince
NSF IPA Assignment
National Science Foundation
$111,820

Marco Sigala
2022 TNA Reporting
Central Coast Water Quality Preservation, Inc.
$119,000

Ahtna Sharpe 2021
Ahtna Environmental Inc.
$8,415

Data Navigator Groundwater and Fish Tissue Assessments
San José State University
$99,682

Delta RMP QA Services
MLJ Environmental
$89,224

SFEI RMP Margins 2023
San Francisco Estuary Institute
$175,576

Nathan Spindel
NSpindel Postdoctoral Fellowship: OCE-PRF: Scaling Up Herbivore Holobiont Physiology from Genes to Populations across a Tropical Upwelling Gradient
National Science Foundation
$342,000

Timothy Stanton
Analysis of Arctic Ocean Fluxes
Office of Naval Research
$56,863

Richard Starr, Amanda Kahn
Long-Term Monitoring of Mid-Depth Rocky Reef Ecosystems in California Marine Protected Areas
California State University, Monterey Bay
$59,500

Alison Stimpert
Integration and Field Evaluation of the Next Generation High-Fidelity Sound and Movement Tags to Investigate Behavioral Response
University of Michigan
$17,413

Edward Thornton
Coastal Land-Air-Sea Interaction-Thornton Portion
Office of Naval Research
$48,287

ROXSI: ROcky shores eXperiments and SImulations- Thornton Portion
University of California, San Diego
$4,794

CONTRACTS, GRANTS, AND FELLOWSHIPS

Jessica Trask
Climate Change Resilience and Economic Capacity Building for Moss Landing Marine Laboratory (MLML)
United States Economic Development Administration
$637,147

Qing Wang
Airborne Instruments to Quantify Optical Turbulence, Aerosol, and Surface Wave Impact on Optical Propagation in the Marine Atmospheric Boundary Layers
Office of Naval Research
$854,723

Qing Wang, Thomas Connolly
A Radio Frequency Path Characterization System for Research on Quantifying Electromagnetic Wave Propagation Through the Lower Atmosphere
Office of Naval Research
$518,622

Michael Wood
Research Opportunities in Space and Earth Science (ROSES)
Jet Propulsion Laboratory
$143,352

Michael Wood
Estimating the Past, Present, and Future Response of Marine Primary Productivity to Greenland Ice Sheet Melt
National Aeronautics and Space Administration
$100,000

Mark Yarbrough, Michael Feinholz
Implementation of MarONet for Support of OCI/PACE Vicarious Calibration
University of Miami
$558,997

College of Social Sciences

Department of Communication Studies

Kristen Cole
Communication As...Accessible
Teach Access
$2,000

Marie Haverfield
IPA
IPA
$30,000

Department of Environmental Studies

Katherine Cushing
CommUniverCity SJSU: Growing by Gardening
Open Space Authority of Santa Clara Valley
$100,000

Dustin Mulvaney
Understanding and Addressing Environmental Justice Impacts of Energy Storage Projects on Local Communities
Portland State University
$98,140

Costanza Rampini, Serena Alexander
Resilient and Equitable Urban Stream Corridors
University of California, Davis
$273,598

Lynne Trulio
RCN-UBE: San Francisco Bay Research Coordination Network for Student Opportunities in Avian Research (SOAR) to Enhance STEM Education and Assess Urban Impacts on Avian Ecology
Stanford University
$8,100

Department of Justice Studies

Dallas Augustine
A Longitudinal Qualitative Study of Fentanyl-Stimulant Polysubstance Use Among People Experiencing Homelessness (PD/PI: McNeil, Knight)
Yale University
$49,810

Margaret Stevenson
San José State University Research Foundation (SJSURF) Service Navigation-2023-2024-Parole Court Entry
Santa Clara County
$200,000

San José State University Research Foundation (SJSURF) Service Navigation-2023-2024
Santa Clara County
$744,445

Bryce Westlake, Younghee Park
SaTC: EDU: Training Digital Forensics Examiners through Hands-on Education Investigating Live Criminal Investigations
National Science Foundation
$498,507

Department of Psychology

Valerie Carr
A Harmonized Medial Temporal Lobe Subregion Segmentation Protocol: An Essential Element for Dementia Research
Ohio State University
$115,027

Cassie Hilditch
Human Factors Considerations and Emerging Trends Associated with Helicopter Air Ambulance Operations
Cherokee Nation
$40,794

Sean Laraway
Human Systems Integration: Collaborative Human Factors Research to Improve Safety, Efficiency and Reliability of NASA's Aeronautics and Space Missions: Phase 2
National Aeronautics and Space Administration
$10,986,356

Sean Laraway, Cassie Hilditch, Lucica Arsintescu
2023 Fatigue Management Training for San Francisco Bar Pilots
California Maritime Academy
$6,000

Randall Mumaw
Autoflight Issue Analysis and Design Recommendations
Boeing North American, Inc.
$126,614

Susan Snycerski
Future Vertical Lift: Collaborative Research on Flight Control, Autonomous Rotorcraft, and Human-Systems Interface Design
National Aeronautics and Space Administration
$845,564

Future Vertical Lift: Collaborative Research on Flight Control, Autonomous Rotorcraft, and Human-Systems Interface Design: Phase 2
National Aeronautics and Space Administration
$969,742

Implementing Macroergonomics for Increasing the Safe, Effective, and Efficient Operation of the Entry Systems and Technology Division's High Enthalpy Facilities

National Aeronautics and Space Administration

$293,282

Susan Snycerski, Ashwani Padthe

Dragonfly Collaboration

The Johns Hopkins University

$84,000

Department of Sociology and Interdisciplinary Social Sciences

Saugher Nojan

Resisting Erasure and Asserting Afghan Cultural and Community Resilience

National Endowment for the Humanities

$148,054

Racialized Hauntings: Afghan Americans Navigating Racialized Religion and Belonging amidst the Forever War

American Council of Learned Societies

$5,000

Joanne Rondilla

Asian American Native Hawaiian/Pacific Islander OHANA Center of Excellence on Empowering Behavioral Health

San José State University

$437,008

Department of Urban and Regional Planning

Kate Wilkin

FireSage: SJSU-NASA SMD Bridge Seed Program Proposal Summary

National Aeronautics and Space Administration

$182,037

Bo Yang

Building a STEM Research and Education Network of GIS and Drone Mapping for Coastal Seagrass Monitoring

National Science Foundation

$356,086

Connie L. Lurie College of Education

Dean's Office

Heather Lattimer, Janene Perez

Regional K-16 Education Collaboratives Grant Program for the Bay Area K-16 Collaborative

Chabot-Las Positas Community College District

$3,919,032

Department of Child and Adolescent Development

Ravisha Mathur, Emily Slusser, Maria Fusaro

SJSU Lab Preschool Summer Program Expansion

Valley Health Foundation

$129,316

Department of Counselor Education

Zachary McNiece

All of Us Researcher Academy Institutional Champion Award

RTI International

$75,000

Dolores Mena, Lorri Capizzi

San Jose GEAR UP Community Achievement Project

United States Department of Education

$1,524,800

Department of Special Education

Sudha Krishnan, Andrea Golloher, Lisa Simpson

Project Mosaic

United States Department of Education

$250,000

Matthew Love

CCLA: California Coalition for Learning Acceleration

Santa Clara County Office of Education

$65,000

Data Adventures

Santa Clara County Office of Education

$363,443

Department of Teacher Education

Katya Aguilar

San José State University Single Subject Intern Program 2023-2024

Milpitas Unified School District

$161,070

Allison Briceño

Cultivating and Sustaining Biliteracy And Bilingualism in Multilingual Youth

University of California, Davis

$55,780

Sandra Ruiz

Emancipatory Anti-Racist Mathematics Teaching and Learning

National Academy of Education

$113,118

Contracted Services

Associated Students

Jane Zamora

CCAMPIS Grant 2021-2025

United States Department of Education

$423,243

Division of Research and Innovation

Abby Queale

The Spartan SBDC

Humboldt State University Sponsored Programs Foundation

$25,000

The Spartan SBDC (TAEP) - Year 3

Humboldt State University Sponsored Programs Foundation

$250,000

The Spartan SBDC (CIP) - Year 3

Humboldt State University Sponsored Programs Foundation

$65,000

The Spartan SBDC - Year 3 - Federal

Humboldt State University

$200,000

Abby Queale, Mohamed Abousalem

Mapping the Path to Evolving Silicon Valley's Ecosystem Equity (EsVEE)

United States Economic Development Administration

$300,000

Office of Sponsored Programs

Deborah Maloney

NSF Graduate Research Fellowship - TBD

National Science Foundation

$49,000

CONTRACTS, GRANTS, AND FELLOWSHIPS

Dr. Martin Luther King, Jr. Library

University Library

Yuqi He, Dawn Hackman
All of Us Data Training and Engagement for SJSU Librarians
Oak Ridge Associated University
$40,000

Facilities Development and Operations

Aaron Klemm
Recycling/Reuse Hotline and Website for the City of Morgan Hill
City of Morgan Hill
$118,000

Recycling/Reuse Hotline and Website for San Mateo County
San Mateo County
$75,000

Recycling/Reuse Hotline and Website for Santa Clara County
Santa Clara County
$50,000

Lucas College and Graduate School of Business

Dean's Office

Hilary Nixon, Ahoura Zandiatashbar
Efficiency Analysis of Parking Management Applications; Case Study of Parkade and Parknav
Transform CA
$80,000

Karen Philbrick
Mineta Consortium for Transportation Mobility (MCTM) TO 024
California Department of Transportation
$107,938

Karen Philbrick, Hilary Nixon
California High-Speed Rail Project
California High-Speed Rail Authority
$665,000

Center for Multi-Modal Mobility in Urban, Rural, and Tribal Areas (CMMM)
University of Maryland
$500,000

Climate Change and Extreme Events Training and Research Program
Department of Transportation
$4,666,011

CSUTC: Transportation Research and Transportation-Related Workforce Education, Training and Development (2023 Renewal: Year 1 of 3)
California State University System
$2,000,000

Research and Education in Promoting Safety (REPS)
Howard University
$450,000

Transit Worker and Rider Safety Best Practices Research Project
University of South Florida
$150,000

School of Information Systems and Technology

Yu Chen
Collaborative Research: An Interdisciplinary Approach to AI Education for Social Good
National Science Foundation
$16,000

School of Management

Anuradha Basu
Silicon Valley Center for Entrepreneurship - Encore Fellow
Fedcap Group
$25,000

Office of the Provost

Division of Student Affairs

Maria Cruz
ASPIRE (Student Support Services) - San José State University - FY 2020-2025
Department of Education
$530,167

The Ronald E. McNair Post-baccalaureate Achievement Program
Department of Education
$300,838

Office of the Provost

Vincent Del Casino, Feruza Amirkulova
ADVANCE Partnership: Kindling Inter-University Networks for Diverse (KIND) Engineering Faculty Advancement in the California State University System
California State University, Fresno
$39,622

Vincent Del Casino, David Parent, Liat Rosenfeld
Project Engineering Success: Increasing Hispanic Student Success in Engineering at San José State University, San José City College and Gavilan College
United States Department of Education
$999,896

Shonda Goward, Joel Morales
Spartan Phalanx: Holistic, Support to Retain Students on Academic Probation
United States Department of Education
$409,150

Undergraduate Studies

Elena Klaw, Andrea Tully
CaliforniansForAll College Service Program (Planning)
CaliforniaVolunteers
$51,927

Matthew Capriotti, Heather Lattimer
CCGI Regional Partnership Grant
California Community Colleges
$56,605

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