SJSU | UNDERGRADUATE RESEARCH OPPORTUNITY PROGRAM

FALL 2024

NEWSLETTER



Message from the Director



As UROP enters the halfway point of its fourth campaign on campus, this year has been marked by tremendous growth and expansion. A combination of increased support from the dedicated President's Office. а recruitment growing team. and research culture on campus created foundation for UROP to welcome its largest cohort ever. This year we received 137 student applications, almost doubling the number of last

year. This growing interest in undergraduate research is encouraging as we explore new ways to expand research opportunities for the next generation of SJSU researchers.

Our 2024-25 student cohort comprises 70 students from diverse majors across campus and 35 participating faculty mentors. Over the course of the fall semester, it has been great to see how many fruitful research partnerships have developed, and the ambitious scope of work students are engaging in. Building on the success of our previous cohorts, which saw students co-author research articles, present at academic and industry conferences, and win several awards, this year's cohort is equally primed for a variety of successes.

In an effort to grow our student research culture on campus, we have intentionally built UROP as a pathway for students to participate in other research opportunities after they have completed their time in the program, such as the McNair Scholars program and Student RSCA fellowship. We hope to extend these partnerships in other contexts as we grow UROP on campus and in the community.

There is great momentum with UROP, and we are excited to see what the next few years have in store. Stay tuned for more!

Dr. Andrew Carter

Message from our Peer Mentors



Sara Nayeem

Molecular Biology Major UROP Cohort Year: 2022-23

After graduating from UROP in June 2023, I returned to the program but this time as a peer mentor! When I was a student of the UROP program, I remember it not only helped me grow as a researcher but also allowed me to develop valuable skills like public speaking, teamwork, and critical thinking. With the students that I am mentoring in the current cohort, I strive to share these experiences and guide them in some shape or form in developing their own skills, such as navigating research challenges, improving communication, and building confidence in their abilities. It's been rewarding to see their growth and enthusiasm as they dive into their research projects. I also enjoy learning from the students and the unique perspectives they bring. As a Molecular Biology major, it's fascinating to hear about their diverse research projects. I think getting research experience as an early undergraduate (freshman/sophomore) is rare, and being funded for it makes the opportunity even better.

I aim to be more than just a mentor—I hope to be a friend and a supportive presence for the students. I hold monthly one-on-one meetings to connect with them individually and also engage with the group during class time every week. I am grateful for the guidance that I receive from Dr. Carter and Dr. Lacy, on how to best be a mentor for the students.

Overall, UROP has been an incredible experience for me, both as a student and now as a peer mentor. I can't wait to see the program and its students continue to grow!

Message from our Peer Mentors

Yama Sekander

Economics Major UROP Cohort Year: 2022-23



I joined the UROP program during my first year of college in 2022 and since then, I have grown so far as a student, scholar, and professional. One of the most underrated aspects of the UROP program is the community you build with your fellow students across every department and major around campus. As one of the peer mentors, I am constantly reminded of the impact that students and faculty around SJSU are making, and the wonderful students I work with never fail to impress everyone around them.

My goals as peer mentor are constantly evolving to support students in this unfamiliar, but enriching journey. However, if there is one thing is true: the students I work with are exceptionally talented and this experience as a peer mentor has been likewise incredibly rewarding.

I am left with a new perspective on the program that I think many on campus don't get to see. Working with Dr. Carter and the rest of the team has been a terrific privilege. There is a creative process, planning, logistics, and execution that go into everything that UROP has to offer. We are always seeking new ways to improve the program, and we are uniquely positioned to create the best program possible.

After a successful semester and as we head into 2025, I have never been more excited for the prospects of the students and the future of UROP!

-Yama

Student Publications, Presentations, and Awards

Congratulations to our students on their accomplishments



Angelica Johnson (2021-22 cohort)

Angelica co-authored a published article "Transforming the discharge conversation through support and structure: A Scoping Review." with her faculty mentor Dr. Marie Haverfield in the research journal International Journal of Nursing Studies Advances.



Arya Patel (2023-24 cohort)

Arya single-authored a case study "Should AAHOA hoteliers decide to 'go it alone?'" to be published in the 7th edition of Tourism: The business of hospitality and travel (Pearson Publishing). The chapter is based on her collaborative work with her mentor Dr. Asbjorn Osland.



Lailani Kenoly (2023-24 cohort)

Lailani presented a poster and lightning talk titled "Using DESI spectra to understand ultra-diffuse galaxies in the Coma cluster" at the Rare Gems in Big Data conference in May in Tucson, Arizona. The presentation was based on her collaborative research with faculty mentor Dr. Aaron Romanowsky.



Pedro Sanvee (2023-24 cohort)

Pedro received Amazon DEI Audio and Data Technology Initiative Scholarship for the 2024-25 academic year.



Madeline Trejo Damian Linares (2022-23 cohort)

Received an acknowledgement in the research article "Global impacts of video gaming behavior on young adults' mental health during the COVID-19 pandemic: A systematic literature review in the journal Social Sciences and Humanities Open



Jae Eun (Clara) Lee (2024-25 cohort)

Participated in the San Antonio Festival in San Jose on November 23, 2024 and is assisting Dr. Belen Moreno on her photovoice project based on the Festival.

Faculty Spotlight | Dr. Bree Grillo-Hill

Dr. Bree Grillo-Hill, an Associate Professor in Biological Sciences and the director of SJSU's prestigious SCILL program, embodies the essence of mentorship and interdisciplinary research at SJSU. Now in her second year with UROP, Dr. Grillo-Hill is mentoring two students this semester and is a passionate advocate for the program's mission of providing paid research experiences for undergraduates. Reflecting on her own experience as a first-generation college student who juggled unrelated jobs to make ends meet, she shares, "I love this program because it allows students to get experience in their field before graduation and get paid at the same time".



Dr. Grillo-Hill's research explores how environmental factors, such as acidity and pH, influence cellular behaviors like proliferation, cell death, and tissue organization—critical processes in cancer progression. This work not only sheds light on disease progression but also underscores the importance of understanding the microenvironment in disease development.

A hallmark of Dr. Grillo-Hill's lab is its collaborative ethos. She cultivates a collaborative environment by encouraging students to work together and support one another. This approach not only fosters a sense of community within the lab but also ensures that students can depend on their peers during demanding periods.

Dr. Grillo-Hill's mentorship extends beyond the lab, equipping students with skills for both academia and industry. She proudly recounts how her students—some with no prior experience in cancer biology—have gone on to pursue Ph.D. programs in cancer biology and other fields or secured roles in the biotech industry. In her mentorship she emphasizes personal development, she says "I want students to develop as researchers as well as individuals," she says. "I encourage them to find their own path and choose their own adventure."

She believes that research can be transformative as an undergraduate: "Getting any kind of research experience is going to benefit you. It helps you learn about science and figure out what you like, which can help direct your career down the road. Moreover, if you love science and figuring out the puzzles it offers, it doesn't feel like work "

Dr. Bree Grillo-Hill's dedication to mentorship, her commitment to interdisciplinary collaboration, and her drive to empower students through research exemplify the core values of UROP. We are thrilled to have her as part of our faculty team and look forward to her continued contributions to our students' academic and professional journeys.

UROP FALL SOCIAL

On November 26th, UROP hosted its annual fall social event in the MLK Library. The event brought together current students and faculty from the 2024-25 cohort and program alumni to connect and engage in community building. Those in attendance celebrated the exciting diversity of partnerships and early successes of our current students in addition to the impactful work being done by program alums. The event was catered by Nirvana Soul, who put together a delicious pastry bar. We look forward to seeing the scope of projects our students develop in the spring!







Welcome 2024-25 Cohort

Student

Aaron Pang, data science Abhishek Prabhu, computer science Abril Gutierrez, biological sciences Alan Xu, computer science Aliyah Manansala, sociology Aman Kaur, applied mathematics Ananeya Damene, electrical engineering Annie Tran, biological sciences Anshula Thirumaran, data science Arnav Kumar, business administration Ashna Gandhi, b<mark>usiness administra</mark>tion Bennett Tang, economics Carrie Chang, public health Clivia Nguyen, data science Danino Corsis, biological sciences Dante Foren, business administration Devashree Agarwal, biological sciences Dominic Audibert, design studies Emily Santana Anzures, biomed. eng. Eric Nguyen, computer science Erika de la Rosa, public health Garrett Payne, materials engineering Harsha Suribhatla, business administration Hector Rios, computer science Hunter Nguyen, computer science Jae Eun (Clara) Lee, communication studies Dr. Belen Moreno Jason Kim, computer science Jeffrey Khaing, biological sciences Jiya Mehta, sociology Jocelyn Gonzalez, forensic science John Lee, electrical engineering Justin Wang, mechanical engineering Kaela Navarette, mechanical engineering Kalia Castro, chemistry

Faculty Mentor Dr. Kim Knight Dr. Ben Reed not vet assigned Dr. Kim Knight Dr. Anji Buckner Dr. Navrati Saxena Dr. Hohyun Lee Dr. Marie Haverfield Dr. Christopher Pham Dr. Ali Mehran Dr. Nancy Da Silva Dr. Charles Park Dr. Charles Park not yet assigned Dr. Bree Grillo-Hill Carli Lowe Dr. Theresa Dinh Dr. Bree Grillo-Hill not <mark>yet as</mark>signed Dr. Kris Borgen Dr. Harit Agroia Dr. Yanika Schneider not yet assigned not yet assigned Dr. Yunjian Qiu Dr Ben Reed Dr. Marie Haverfield Dr. Scott Jarvie not yet assigned

Dr. Shilpa Gupta

Dr. Ali Mehran

Dr. Hohyun Lee

Dr. Ningkun Wang

Welcome 2024-25 Cohort

Student

Krishiv Haranath, computer science Leena Rehman, biological sciences Loghann Bellamy, sociology Loi Nguyen, software engineering Luisa Torres, psychology Mariam Malik, psychology Matthew Philip, mechanical engineering Miguel Lopez-Zambrano, biomed. eng. Min Khant Ko, mechanical engineering Mizan Rupan-Tompkins, comp. science Megan Badrak, biological sciences Ninel Sutherland, business administration Pedro Sevilla-Ramos, psychology Prachi Arora, business administration Prisha Mishra, business administration Rhea Shaik, psychology Romanshu Gupta, eng. technology Ronald Li, computer science Ryan Morla, business administration Sachi Kelkar, computer science Sanjana Ramesh, biological sciences Sarah Hoang, computer science Sarah Le, chemistry Sasha Benjamin, biological sciences Sathvika Nadipalli, data science Saven Ali, undeclared Siddharth Singh, eng. technology Somalia Perkins, public health Sriram Loganathan, physics Tanish Shah, software engineering Thaneesha Singh, data science Valeria Cortez-Baez, public health Vinny Huynh, software engineering Xiao Qi Lee, computer science

Faculty Mentor

Dr. Vishnu Pendyala

Dr. Katie Wilkinson

Dr. Scott Jarvie

Dr. Yunjian Qiu

Dr. Lesther Papa

Dr. Katie Wilkinson

Dr. John Lee

Dr. An. Ramasubramanian

Dr. Christopher Pham

Dr. Behin Elahi

Dr. Taylor Arhar

Dr. Elizabeth Madden

Dr. Mary Anderson

Dr. Harit Agroia

Dr. Jess Chong

Dr. Theresa Dinh

Dr. Navrati Saxena

Dr. Ben Reed

Dr. Marcella McCollum

Dr. <mark>Shilpa</mark> Gupta

<mark>Dr. Taylor</mark> Arhar

Dr. Navrati Saxena

Dr. Ningkun Wang

Dr. Anji Buckner

Dr. Mark Barash

Dr. Mary Anderson

Dr. Asbjorn Osland

Dr. Sheryl Ehrman

Dr. John Lee

Dr. Vishnu Pendyala

Dr. Theresa Dinh

Dr. An. Ramasubramanian

Dr. Navrati Saxena

Dr. Navrati Saxena

Program Updates/Upcoming Events

2025-26 Student and Faculty Applications

Are you interested in participating in UROP as a student or faculty mentor? The open enrollment period will begin in mid-April. Follow our social media and website for more specific details. You can fill out an interest form to receive program updates and get notified when applications go live.

Celebration of Research

Each year UROP students participate in the campus-wide Celebration of Research event, where they share the work from their year-long faculty partnership. This year's Celebration of Research will take place during SJSU Research Week on April 24.

UROP Student Research Showcase

The inaugural UROP Student Research Showcase will be another opportunity for our students to share their research projects with our campus community. The lightning talks style format will provide a fun and engaging atmosphere for those in attendance. The event will take place on May 12th in the SU Ballroom.

UROP at the Spring Orientation Resource Fair

UROP will participate in the 2025 Spring Orientation Resource Fair. The orientation sessions are Monday, January 13 (330-5p) and Tuesday, January 14 (330-5p). Both events will take place on the 7th Street Plaza. Stop by to say hello and learn more about the program

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