Fall 2024 Newsletter

OFFICE OF UNDERGRADUATE RESEARCH SERVICES (OURS)



WHAT IS OURS

The Office of Undergraduate Research Services (OURS), established in 2016, is charged with expanding undergraduate research opportunities to the California State University, Long Beach student body. OURS works in collaboration with staff and faculty in all CSULB Colleges, Divisions, and units to cultivate strong relationships in support of undergraduate research.

OURS OFFICE

Please stop by our office in SSSC-120 to ask us any questions related to undergraduate research, meeting with a peer advisor, or regarding upcoming undergraduate research workshops.

END OF THE FALL 2024 SEMESTER

We would like to commend all students, staff, and faculty for the work you do as part of the various undergraduate research programs this semester. Congratulations and good luck in your future endeavors to the CSULB Class of 2024. For our new and continuing students, we look forward to working with you all this upcoming year as we return to campus for the spring semester.

Elyzza Aparicio, Ph.D. OURS Director

CONTACT INFORMATION

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• <u>37th Annual Student Research</u> <u>Competition (SRC)</u>

> Note: Each underlined title on this page is clickable and will take you to the respective page

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MEET YOUR INTERIM ASSOCIATE VICE PRESIDENT OF RESEARCH & SPONSORED PROGRAMS, BARBARA TAYLOR, PH.D.



Barbara Taylor is serving as the Interim AVP Research at CSU, Long Beach. She was a first-generation college graduate who went on to get her PhD from the University of British Columbia and had further training in post-doctoral positions at the University of Calgary and Dartmouth Medical Schools. Dr Taylor's research interests are metabolism and energetics, as well as the cellular mechanisms of aging—especially traditional medicines that have anti-aging properties. In her first faculty position at the University of Alaska Fairbanks, she was the inaugural director of the office of undergraduate research, interim director of the University Honors program, and was awarded a prestigious NIH BUILD, a \$24M biomedical training grant. Barbara joined CSULB in 2016. Her commitment to undergraduate research continues, and she passionately advocates for multidisciplinary research.

STUDENT HIGHLIGHTS

MAYA WYR WON A POSTER PRESENTATION AWARD!

- Project titled "Spike-dependent Differences in Camelid Coronavirus Replication" with CSULB faculty member Dr. Peter Ramirez, and UPenn faculty member Dr. Susan Weiss.
- "Over this past summer, I interned at the University of Pennsylvania in the Weiss Lab. I studied the differential phenotypes of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) variants. I've been researching coronaviruses since June 2023 when I began my project in the Ramirez Lab on SARS-CoV-2 pathogenesis. The 2024 NDiSTEM conference is the third national conference I've attended, and I had a wonderful time interacting with other researchers, presenting my work, and developing my professional skills."



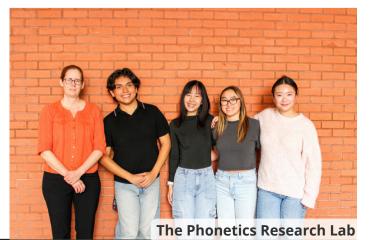
WESLEY CHEN GETS PUBLISHED!

"With the support of BUILD and OURS, my PI (Dr. Siavash Ahrar), co-PI (Dr. Douglas Pace), and I were able to publish a research article this semester. It was published in AIP Advances on 11/19/24, titled "Microfluidics for hydrodynamic investigations of sand dollar larvae" (<u>https://doi.org/10.1063/5.0230905</u>).

THE PHONETICS RESEARCH LAB

The Phonetics Research Lab, under the supervision of Dr. Nancy Hall, is currently investigating the development of "liquid" (L and R) sounds in Spanish-English bilingual children. Liquid sounds are relatively difficult to learn, and are pronounced differently in English and Spanish. Student research assistants are using Praat software to analyze audio recordings from 3-6-year-old children. The lab also plans to begin voice research using an electroglottograph (EGG), thanks to a generous

equipment grant from CSULB BUILD. Electroglottography (EGG) is a safe and noninvasive technique for studying vocal fold vibration, by measuring the electrical conductance between two electrodes placed on the neck. It is used for linguistic, clinical, and singing research. Please feel free to reach out to Dr. Nancy Hall (Nancy.Hall@csulb.edu) if you are interested in volunteering.



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UNDERGRADUATE RESEARCH OPPORTUNITY PROGRAM (UROP)

WHAT IS UROP

The <u>Undergraduate Research Opportunity Program (UROP</u>) is a one-year program that offers first- and second-year students the chance to participate in the research and creative process with faculty.

STUDENT SPOTLIGHTS

- Noe Salazar is a UROP alum working with Dr. Cheryl Rock on project titled "Sustainable Snacking, Mind Bright". Noe presented at the Southern California Conferences for Undergraduate Research (SCCUR).
 - "I enjoyed the experience presenting at SCCUR, I was nervous at first due to the number of students who were presenting their research and the number of professionals who were interested on our project. Conducting research on sustainable snacking has been the best part if this journey due to the creativity aspect of product development."



OURS

- Maria Perez Gonzalez, Eling Monfil, and Kimberly Ortiz attended the 2024 California Sociological Association (CSA) Annual Meeting at Cal Poly Pomona with their faculty sponsor, Dr. Janet Muniz.
 - "Attending the CSA conference was rewarding, giving me the chance to network and receive feedback. I'm excited to apply these insights as I move forward in my career!" -Maria Perez Gonzalez, Sociology
 - "I loved seeing everyone's input and the important conversations that were had. I also loved seeing people being passionate about their research and seeing topics that are usually not discussed being brought to light." -Eling Monfil, Psychology
 - "It was truly inspiring to be surrounded by so many researchers who shared similar backgrounds and whose research focused on minority communities. Our participation in this conference reminded me that people from my background also belong in professional spaces like this, and I am one of them, [and that] I too can advocate for those in need through research." -Kimberly Ortiz, Sociology



Maria Perez Gonzalez, Dr. Janet Muniz, Kimberly Ortiz, Eling Monfil

OURS CONNECTS

WHAT IS OURS CONNECTS

<u>OURS Connects</u> is a semi-structured research program that pairs undergraduate students with faculty research mentors so that students may contribute to the advancement of faculty research, scholarly, and creative activities. <u>Applications for OURS Connects are open year-round.</u>

STUDENT SPOTLIGHTS

- Launa Chhor will be joining the McNair Scholars Program in Summer 2025
- Enrique Alvarez participated in the Beach Investment Group (BIG) Program
- **Emery Pham** will attend the 2025 SoCal Writing Centers Association (WCA) Annual Conference on March 22, 2025

ALUM SPOTLIGHT - JOSHUA DIAZ

"I was admitted into the LAEP program at the beginning of Fall 2023 and remained actively engaged throughout the academic year. Under the mentorship of Dr. Soo Hyun Cho, I had the unique opportunity to lead the development of a new research project, significantly enhancing my research skills. The project utilized data collected through Dr. Cho's collaboration with a national team of Consumer Science researchers, funded by Wells Fargo, which aimed to assess trust in financial institutions across various underrepresented demographic groups.



Within the dataset, I focused on key variables such as Life Satisfaction, Financial Self-Efficacy, and Financial Stability. Our study investigated the mediating effect of Financial Stability on the relationship between Financial Self-Efficacy and Life Satisfaction. The analysis revealed notable findings, including a partial mediating effect and significant socio-demographic differences across all variables of interest.

The culmination of our research was its acceptance for presentation at the annual American Council on Consumer Interests (ACCI) conference. I delivered a 15-minute oral presentation of our findings, which received enthusiastic feedback. Our session moderator expressed interest in the research and encouraged us to submit a manuscript for inclusion in a special issue of the Journal of Financial Counseling and Planning. Currently, Dr. Cho and I are drafting the manuscript, and we plan to submit it before the end of the year."

MCNAIR SCHOLARS PROGRAM

WHAT IS MCNAIR

The <u>Ronald E. McNair Postbaccalaureate Achievement Program</u> is a TRIO program funded by the U.S. Department of Education and designed to prepare and support underrepresented undergraduate students in their pursuit of doctoral studies.

SUMMER 2024 CSULB MCNAIR SCHOLARS SYMPOSIUM

- **Natalie Vega**: presented research poster titled "Fraud protection among Kenner vintage Star Wars Collecting Groups".
- **Mika Toyama**: presented research poster titled "Learning to be Political: Social Work Students' Political Behaviors".
- **Alejandro Duran**: presented research poster titled "The regulation of boltinginduced leaf senescence by the ANAC046 transcription factor in Arabidopsis thaliana".
- Danny Sarmiento: presented research poster titled "A User Study on Multi-Model Feedback with Tactile Alerts for UAM Concepts of Operation with CAVE VR system".
- Viviana Hernandez: presented research poster titled "CSU Dashboard Spotlights Higher Education Equity Gaps: A Preliminary Exploration of Rhetorical Sensitivity and First-Generation Student Success"
- **Jacob Nguyen**: presented research poster titled "Intervention Enactment Moderates Prenatal Stress Management Attendance & Adaptive Coping".





MCNAIR SCHOLARS PROGRAM

EXTERNAL SUMMER RESEARCH PROGRAM PARTICIPATION

- Maylia Brown: University of Michigan SROP
- Makana Woods: University of Michigan SROP
- Ali Curiel Silva: Rutgers University and USAC Summer Research Program in Santiago, Chile.
- Jose Pineda: Center for Astrophysics at Harvard University Summer Research

CNSM RESEARCH PRESENTATIONS

- **Mika Toyama**: presented research poster titled, "Learning to be Political: Social Work Students' Political Behaviors".
- **Alejandro Duran**: presented research poster titled "The regulation of boltinginduced leaf senescence by the ANAC046 transcription factor in Arabidopsis thaliana".
- **Jose Pineda**: presented research poster titled, "Energy Extraction via Magnetic Reconnection in a Rotating Black Hole".



UNDERGRADUATE RESEARCH INITIATIVE FOR SCIENTIFIC ENHANCEMENT (U-RISE)

WHAT IS U-RISE

The <u>Undergraduate Research Training Initiative for Student Enhancement (U-RISE</u>) program is funded through a grant from the National Institute of General Medical Sciences (NIGMS) of the National Institutes of Health (NIH). The program aims to broaden perspectives in future scientific and biomedical research by identifying students interested in pursuing research as a career and by providing training opportunities to be competitive for entering graduate programs. This two-year training program includes mentored research, an off-campus summer research experience (8-12 weeks), professional development workshops, graduate school preparation, and conference support.

We have a joint research application with the BUILD program. <u>The application is</u> <u>now open</u> and will be due March 2, 2025. Students selected for the program will start in June 2025 and continue for two years, pending satisfactory progress made during year 1 and funding from the NIH.

CONFERENCE ATTENDANCE

- 2024 SACNAS National Diversity in STEM Conference (October 26-28, 2023) in Phoenix, AZ
 - Maya Wyr (U-RISE) won a poster presentation award in the "Life Sciences: Microbiology" category for her presentation titled "Spike-dependent Differences in Carnelid Coronavirus Replication". Maya completed this research during the summer at University of Pennsylvania Perelman School of Medicine in the IDEAL Research Program.
- 2024 Biomedical Engineering Society (BMES) Annual Meeting (October 23-26, 2024) in Baltimore, MD
 - Grace Boulos (U-RISE Year 2 Scholar) presented a poster titled "Cardiovascular Dysfunction Induced via Spinal Cord Damage" at the Biomedical Engineering Society (BMES) Annual Meeting. This research was completed during their summer 2024 program with the University of Miami.
- 2024 Western Society of Naturalists 105th Meeting (November 7-10, 2024) in Portland, OR
 - Ahira Diaz (U-RISE Year 2 Scholar) presented a poster titled "Juvenile Bioenergetic Effects of Temperature and Food Availability in the Endangered Sunflower Sea Star, Pycnopodia helianthoides". This research was completed at Moss Landing Marine Laboratories over summer 2024 with mentor, Dr. Nathan Spindel.

LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION (LSAMP)

WHAT IS LSAMP

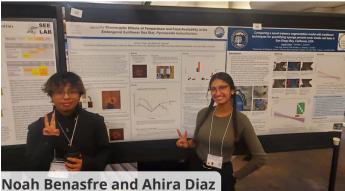
Initiated in 1993-94, the CSU-<u>LSAMP</u> Alliance, which includes all 23 campuses of the California State University (CSU) system, supports a coordinated and comprehensive system-wide approach to broadening participation in science, technology, engineering and mathematics (STEM) disciplines. Each of the CSU-LSAMP programs offers activities and services designed to improve retention and graduation of undergraduate students in STEM. In addition, CSU-LSAMP seeks to increase the number of CSU-LSAMP students who enter STEM graduate programs. On our campus, we offer paid mentored research; research and career advising; reimbursement for STEM textbooks, GRE, and graduate application fees; support in applying to graduate programs, and workshops.

We support students in the College of Natural Sciences and Mathematics, and College of Engineering.

<u>Our research application is open!</u> The deadline to apply is March 2, 2025. We have 2 research program tracks which runs for 8 weeks in the summer and for a full academic year (Fall 2025-Spring 2026).

CONFERENCE ATTENDANCE

- 2024 SACNAS National Diversity in STEM Conference (October 26-28, 2023) in Phoenix, AZ
 - Pearl Lambarena (LSAMP) received a travel scholarship to attend this year's SACNAS NDISTEM Conference. Pearl presented a poster titled "Determining whether Moesin is a cellular dependency factor of HIV-1 Nef". Their research was completed with faculty mentor, Dr. Peter Ramirez, in the CNSM Department of Biological Sciences.
- 2024 Western Society of Naturalists 105th Meeting (November 7-10, 2024) in Portland, OR
 - Noah Benasfre (LSAMP Fellow) presented a speed talk titled "Feastfast Lifestyle: Physiological Effects of Daily Foraging Dlexibility in Blue Whats (Balaenopetra Musculus)". This research was completed during their summer 2024 program at California State University, Monterey Bay.



WHAT IS BUILD

The CSULB <u>BUILD Program</u> offers intensive, hands-on research and training opportunities for undergraduate students designed to prepare them to excel in doctoral programs, as well as health-related research careers. It is one of 10 programs in the United States funded by the National Institutes of Health (NIH) BUILD Initiative.

CELEBRATING 10 YEARS OF CSULB BUILD!

Happy 10-year Anniversary to the CSULB BUILD program! Mappy 10-years ago, the Building Infrastructure Leading to Diversity (BUILD) program began right here at The Beach as CSULB was selected as one of 10 sites across the nation to receive the prestigious BUILD grant from the National Institutes of Health (NIH) and General Medical Sciences (NIGMS). The goal of this program is to strengthen and develop a sustainable pipeline for advanced research degrees in health-related research across a variety of disciplines including engineering and the behavioral, biological, clinical, physical, public health, and social sciences.

We'd like to recognize all those in our BUILD community who have impacted and been impacted by this program including student trainees/alumni, graduate mentors/assistants, staff, faculty research mentors, training directors, PIs, CSULB leadership, campus/community partners, pipeline partners, family members of the trainees, and all other supporters! You all make our community stronger!

To learn more about the history of CSULB BUILD and the goal for the next 10 years, check out the Quest Magazine Article, <u>Identity Shift</u>!

FALL 2024 GRADUATING SENIORS

- Jonathan Contreras Perez (Year 2 Scholar) - Biology
- Kerollos Roufael (Year 2 Scholar) - Molecular Cell Biology & Physiology



Jonathan Contreras Perez



AWARDS/HONORS

- Academy of Nutrition and Dietetics Foundation Student Stipend Academy of Nutrition and Dietetics Foundation
 - Manuel Marroquin, a senior NIH BUILD Fellow majoring in Nutrition & Food Sciences (option in Dietetics) received the Academy of Nutrition and Dietetics Foundation Student Stipend worth \$5,000.
- Sharon Stephens Brehm Undergraduate Psychology Scholarship – American Psychological Foundation
 - Calvin Chiu, a senior NIH BUILD Fellow majoring in Psychology, received the Sharon Stephens Brehm Undergraduate Psychology Scholarship, a nationally competitive award worth \$5,000 for outstanding students in psychology; based on contributions, academics, research, and community involvement in the field of psychology. Only 8 outstanding psychology undergraduate students were selected to receive this award to defray educational expenses.
- Graduate School Application Scholarship American Academy of Clinical Neuropsychology
 - Calvin Chiu, a senior NIH BUILD Fellow majoring in Psychology, received the Graduate School Application Scholarship, an award worth \$550 that was conferred to students for knowledge, awareness, and experience in researching within the field of neuropsychology. Only 40 students were selected to receive this award that acknowledges those from diverse and inclusive backgrounds.





CONFERENCE TRAVEL

Kudos to all our BUILD trainees who presented at/attended conferences this fall!

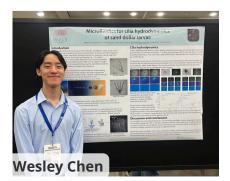
Conference Presentations				
Conference	BUILD Trainee(s)	Major, Year in School	Presentation Title	
Society for Neuroscience (SFN) Oct. 5-9, Chicago, IL	Madison Roach , Year 2 BUILD Scholar	Psychology and Human Development, senior	"One-trial nicotine- induced locomotor sensitization induces sex- and age- dependent differences in male and female rats" – poster presentation	
CSU Council on Ocean Affairs, Science &Technology (COAST) Annual Meeting Oct. 11, Long Beach, CA	Wesley Chen, Year 2 BUILD Scholar	Biomedical Engineering, senior	"Investing ciliary- mediated hydrodynamics of sand dollar larvae via millifluidics" – poster presentation	
American Public Health Association (APHA) Oct. 27-30, Minneapolis, MN	Jo Estrada , Year 2 BUILD Scholar	Microbiology, senior	"A method to predict contributing factors during a pandemic: Social determinants of health and their influence on COVID-19 mortality rates relative to government restrictions at the county-level, 2020/21 flu season" – poster presentation	

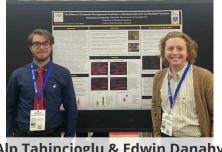
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BUILDING INFRASTRUCTURE LEADING TO DIVERSITY (BUILD)

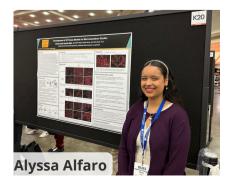
CONFERENCE TRAVEL

Conference Presentations				
Conference	BUILD Trainee(s)	Major, Year in School	Presentation Title	
Biomedical Engineering Society (BMES) Annual Meeting Oct. 23-26, Baltimore, MD	Alyssa Alfaro , Year 2 BUILD Scholar	Biomedical Engineering, senior	"Development of 3D Tissue Models for Microvasculature Studies" – poster presentation	
	Wesley Chen, Year 2 BUILD Scholar	Biomedical Engineering, senior	"Microfluidics for Hydrodynamics of Ciliated Larvae" - poster presentation "Aquavert Imaging & Microfluidics for Vertical Swimming of Microorganisms" – oral presentation	
	Alp Tahincioglu , Year 2 BUILD Scholar	Biomedical Engineering, senior	"The Effects of Composite Bioengineered Scaffolds on Myoblast Alignment and Myotube Formation" – poster presentation	
	Edwin Danahy , Year 2 BUILD Scholar	Biomedical Engineering, senior	"The Effects of Composite Bioengineered Scaffolds on Myoblast Alignment and Myotube Formation" – poster presentation	





Alp Tahincioglu & Edwin Danahy



BUILD/U-RISE APPLICATION OPEN!

Apply to the Building Infrastructure Leading to Diversity (BUILD) Program

The BUILD application will be opening November 30, 2024 and is due March 2, 2025. We host a joint application with the CSULB Undergraduate Research Initiative for Scientific Enhancement (U-RISE) Program, so when you submit your application, it will be reviewed by both programs! To get started, visit <u>https://www.csulb.edu/build/apply</u> to review the application elements checklist.

For more information about the BUILD Program, please visit the CSULB BUILD website: <u>www.csulb.edu/build</u>. Stay tuned for upcoming workshops and info sessions in Spring 2025

And if you have any questions about the application, feel free to email <u>jointapp@csulb.edu</u>!



CENTER FOR LATINO COMMUNITY HEALTH, EVALUATION AND LEADERSHIP TRAINING

ABOUT CENTER FOR LATINO COMMUNITY HEALTH, EVALUATION AND LEADERSHIP TRAINING

The <u>Center for Latino Health</u> received a third USDA grant for \$975,314 to support the "Leveraging Interdisciplinary Nutritional Knowledge (LINK) Program". Using a multidisciplinary approach, LINK will effectively address nutrition-related issues with a focus on Latino Health. To get to the root of health issues, LINK's approach will use a combination of epidemiology, biology, sociology, psychology, anthropology, and social work. Students will conduct externships at nonprofit organizations, local health departments, and research organizations. The established partnerships will enhance the transdisciplinary nature of training and development. The LINK Program will promote the success of students in the food and human sciences professional and scientific workforce.

HARVESTING HEALTHY HABITS RESEARCH FELLOWSHIP

The program aims to increase the number of underserved CSULB undergraduate and graduate students prepared to enter the workforce or graduate school by providing a comprehensive research training and experiential learning experience. Research fellows engage in a community-based research project aimed to improve healthy eating behaviors among underserved children in 3rd, 4th, and 5th grade and their families in the City of Long Beach. The intervention is child-focused and family-based, aiming to bring about changes at both the individual and family levels through interactive sessions. Each session has three main components: nutrition education, hands-on gardening, and hands-on food demonstration. As research fellows, students are involved in several aspects including participant recruitment and enrollment, data collection, data entry and management, and delivery of the intervention sessions. Research fellows are also guided through the abstract and poster development process to submit to a local conference or to present at Week of RSCA.

• Research Fellows

- Alexis Pope Nutrition & Dietetics
- Cristian Giron Nutrition & Dietetics
- Thanh Danh Nutrition & Dietetics
- Maria Porta Nutrition & Dietetics

CENTER FOR LATINO COMMUNITY HEALTH, EVALUATION AND LEADERSHIP TRAINING

HARVESTING HEALTHY HABITS RESEARCH FELLOWSHIP

Research Fellow Spotlight: Alexis Pope

Alexis Pope started as an ÁNDALE Scholar Fall 2023 working under the guidance of her mentors Dr. Melawhy Garcia and Natalia Gatdula. In January 2025, she started as a Harvesting Healthy Habits Research Fellow and has been instrumental to participant recruitment, data collection, intervention facilitation and logistics, and more. She presented her research titled Can parenting feeding practices influence fruit and veggie consumption among Latino Children? at the USC DORI's Annual Research Symposium on Diabetes & Obesity in February 2024. She recently submitted an abstract titled Parental Influences on Hispanic/Latino children's fruit and vegetable consumption to the Society of Behavioral Medicine 2025 Annual Meeting which will be held in March 2025.



"My experience as a Harvesting Healthy Habits Research Fellow sparked my passion for research, taught me the importance of professionalism, and making a positive impact on the community. Through this experience, I've learned how to serve and make a meaningful difference in the lives of the unrepresented populations that have sentimental value to me."

-Alexis Pope

EAT, PLAY, GO! RESEARCH FELLOWSHIP

Undergraduate and graduate students receive training in community-engaged research and have the opportunity to implement a youth-focused, family-based intervention to address individual and parenting behaviors, and the family/home environment that may place Latino youth at increased risk for overweight and obesity. The intervention focuses on implementing strategies to address obesity and related chronic diseases including physical activity, improving fruit and vegetable consumption, and strengthening communities with behaviors that encourage healthy lifestyles. Through training and experiential learning, the program aims to increase the pool of qualified health and nutrition professionals to enter the workforce to prevention and address chronic conditions among Latino youth.

CENTER FOR LATINO COMMUNITY HEALTH, EVALUATION AND LEADERSHIP TRAINING

EAT, PLAY, GO! RESEARCH FELLOWSHIP

Research Assistants

- Anne Trujillo Political Science
- Daniel Perez Kinesiology
- Itzel Torrico Molecular Cell Biology and Physiology
- Jocelyn Aldana Liberal Studies
- Mayra Hernandez Molecular Cell Biology and Physiology
- Marlon Zelaya Nutrition & Dietetics

Research Intern Spotlight: Marlon Zelaya

Marlon Zelaya is a fourth-year Nutrition & Dietetics major who joined the Eat, Play, Go! study team in the 2024 spring semester and has become an instrumental part of the research team. Eager to expand his skills, Marlon has immersed himself in various aspects of the project including facilitating health education sessions to Latino families, collecting data in a culturally competent interview-style format, and entering and analyzing data using SPSS. In April 2024, Marlon presented his research poster titled The Influence of Parenting Strategies on Sedentary Time Among Latino Children at Week of RSCA using data he helped collect.



"As an Eat, Play, Go! research assistant I've learned and developed skills, such as conducting data collection, data entry, and facilitating health education classes, and much more, which has prepared me in my aspirations of becoming a registered dietitian. Additionally, I had the pleasure of connecting with Latino families in the Long Beach community while working alongside a great, supportive team."

-Marlon Zelaya

CENTER FOR LATINO COMMUNITY HEALTH, EVALUATION AND LEADERSHIP TRAINING

EAT, PLAY, GO! RESEARCH FELLOWSHIP

Research Intern Spotlight: Daniel Perez

Daniel Perez, a fourth-year kinesiology major, joined the Eat, Play, Go! study at the start of the Fall 2023 semester. Over this time, he has shown unwavering dedication, problem-solving skills, and a positive attitude which has been instrumental in advancing the study. Daniel has helped train new research interns, facilitated health education sessions using cultural competency, and taken the lead in cleaning data that is collected using SPSS. Looking ahead, he plans to pursue a graduate degree in public health or nursing to continue his work in improving community health.



"Interning with the Eat, Play, Go! study has provided me the methods to utilize health education to aide in improving the health levels of underserved, Latino communities. Engaging with community members to discuss topics such as nutrition literacy, physical activity, and goal setting solidified my aspirations for a career in preventative care. Thank you Eat, Play, Go! for the ability to apply this knowledge in real world situations and for connecting me to students who share similar goals and interests!"

-Daniel Perez

ABOUT ABRCMS

The The Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS) is one of the largest communities of underrepresented minorities in science, technology, engineering and mathematics (STEM). Students attend this conference to present their research, enhance professional development skills, explore graduate schools, and network (<u>https://www.abrcms.org/</u>).

The conference included keynote speakers, poster and oral presentations, ePoster sessions, and professional developmental seminars for students planning careers in the biomedical sciences.

ABRCMS 2024 TRAVEL AWARD RECIPIENTS

- Manuel Marroquin is a senior NIH BUILD Fellow majoring in Nutrition and Food Science, option in Dietetics, who received an ABRCMS Travel Award for his abstract titled "Nourishing Communities: The Impact and Future of SNAP-Ed Programs" for poster presentation. Manuel's faculty research mentor is Dr. Virginia Gray in the Department of Nutrition & Dietetics, CHHS.
- Alexander Uy is a junior NIH BUILD Scholar majoring in Electrical Engineering who received an ABRCMS Travel Award for his abstract titled "Characterization of Flexible PCBs Using Polyethylene Terephthalate Substrates and the Effects of Bending on Conductivity" for poster presentation. Alexander's faculty research mentor is Dr. Ava Hedayatipour in the Department of Electrical Engineering, COE.

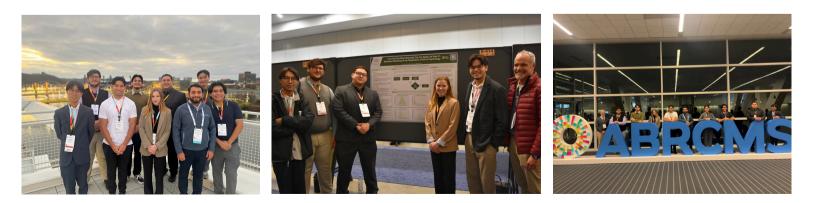


BUILD STUDENTS AT ABRCMS

Alyssa Alfaro , Year 2 BUILD Scholar	Biomedical Engineering, senior	"The Regulation of Endothelial YAP1/TAZ and VEGFR2 by Shear Stress" – poster presentation
Calvin Chiu , BUILD Fellow	Psychology, senior	"A Heuristic Evaluation of Usability for the Epocrates Medication and Clinical Decision Tool Application" – e- poster presentation
Austin Esparza, Year 1 BUILD Scholar	Molecular Cell Biology & Physiology, junior	"Sequences to Seas: Dynamic Evaluation of MarinePhage Metagenomes" – poster presentation
Manuel Marroquin, BUILD Fellow	Nutrition & Food Sciences, option in Dietetics, senior	"Nourishing Communities: The Impact and Future of SNAP-Ed Programs" – poster presentation
Vincent Miramontes- Andrade, Year 1 BUILD Scholar	Speech-Language Pathology, junior	"A Case Study on the Development of Liquid Sounds in Spanish- English Bilingual Children" – poster presentation

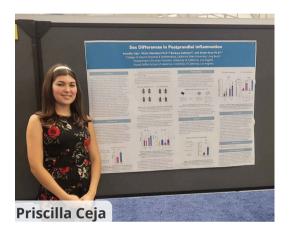
Sarah Nguyen , Year 1 BUILD Scholar	Healthcare Administration, junior	"Qualitative Insights into Service Dog Training Guidelines: A Nationwide Study" – poster presentation
Bella Rodrigues, Year 1 BUILD Scholar	Psychology and Statistics, junior	"If at First You Don't Succeed, Try, Try AgainOr <u>Don't?:</u> Statistical Modeling of the Replication Crisis in Psychology" – poster presentation
Kerollos Roufael, Year 2 BUILD Scholar	Molecular Cell Biology & Physiology, senior	"C1q Influences Macrophage Cytokine Responses via Liver X Receptor Activation" – poster presentation
Alexander Uy, Year 1 BUILD Scholar	Electrical Engineering, junior	"Characterization of Flexible PCBs Using Polyethylene Terephthalate Substrates and the Effects of Bending on Conductivity" – poster presentation

• **Brandon Lee** (BUILD Fellow and senior Chemistry major) and **Robert Garcia** (Year 1 BUILD Scholar and junior Molecular Cell Biology & Physiology major) attended the Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS), which took place Nov. 13-15 in Pittsburgh, PA.



U-RISE SCHOLARS AT ABRCMS

- **Grace Boulos** (U-RISE Year 2 Scholar) presented a poster titled "Cardiovascular Dysfunction Induced Via Spinal Cord Damage". This research was completed during their summer 2024 program with the University of Miami.
- Priscilla Ceja (U-RISE Year 2 Scholar, UROP alum) presented a poster titled "Sex Differences in Postprandial Inflammation". Priscilla completed this project over summer 2024 in the UCLA-Caltech MSTP Richard Morgan Undergraduate Research Fellowship.
- Angelica Cristobal (U-RISE Year 1 Scholar) presented a poster titled "A SARS-CoV-2 Virus Like Particle (SC2-VLP) Assay to Evaluate Heparan Sulfate-Like Compounds for use as

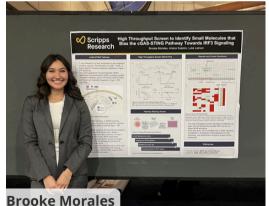


broad-spectrum antivirals". This work was completed with faculty mentor, Dr. Peter Ramirez, in the CNSM Department of Biological Sciences.

- Ahira Diaz (U-RISE Year 2 Scholar) presented a poster titled "Juvenile Bioenergetic Effects of Temperature and Food Availability in the Endangered Sunflower Sea Star, Pycnopodia helianthoides". This research was completed at Moss Landing Marine Laboratories over summer 2024 with mentor, Dr. Nathan Spindel.
- Aden Gomez (U-RISE Year 2 Scholar) presented his poster titled "Engineering Hybrid Polyketide Synthases to Generate Therapeutic Natural Products". Aden completed this research project while in the Amgen Scholars Program at UC Berkeley over summer 2024.
- Abby Gregorio (U-RISE Year 1 Scholar) presented a poster titled "Investigating Muscle Fiber Formation on dECM-based Scaffolds". Abby's faculty mentor is Dr. Perla Ayala in the COE Department of Biomedical Engineering.
- Amaris Guevara (U-RISE Year 1 Scholar, UROP alum) presented a poster titled "Design and Development of a Hand Prosthetic Device with Pressure Feedback for Manipulation Tasks". Amaris's faculty mentor is Dr. Emel Demircan in the COE Biomedical Engineering and Mechanical and Aerospace Engineering Departments.

U-RISE SCHOLARS AT ABRCMS

- Nicholas Hoa (U-RISE Year 1 Scholar) presented a poster titled "Role of Androgen Receptor in Regulation of Sex and Age Differences in Home-cage Behaviors". This research was completed with faculty mentor, Dr. Houng-Wei Tsai in the CNSM Department of Biological Sciences.
- Daniel Lopez (U-RISE Year 2 Scholar) presented his poster titled "Mutation of Activin Receptor II A to Increase Binding Efficiency in Ligands Activin C and E". Daniel completed this research project while at a summer 2024 research experience at the American Society of Pharmacology and Experimental Therapeutics Summer Undergraduate Research Fellowship Program at the University of Cincinnati.
- Ethan Lucsik (U-RISE Year 2 Scholar) presented his poster titled "Iron-Containing Metal Organic Frameworks on Stainless-Steel as a Drug Delivery System". Ethan's faculty mentor is Dr. Fangyuan Tian in the CNSM Department of Chemistry and Biochemistry.
- Brooke Morales (U-RISE Year 2 Scholar) presented her poster titled "High Throughput Screen to Identify Small Molecules that Bias the cGAS-STING Pathway Towards IRF3 Signaling". This research was completed over summer 2024 under Dr. Luke Lairson at the Scripps Research Institute in La Jolla. CA.
- Aran Multani (U-RISE Year 2 Scholar) presented a poster titled "Synthesis and Biochemical Evaluation of Fmoc-Amino Ester Analogues as



Butyrylcholinesterase Inhibitors for the Potential Treatment of Alzheimer's Disease". Aran's faculty mentor is Dr. Jason Schwans in the CNSM Department of Chemistry and Biochemistry.

• Christina Nguyen (U-RISE Year 1 Scholar) presented a poster titled "Juvenile exposure to methylphenidate (ritalin) enhanced nicotine reward without affecting behavioral sensitization in male and female adolescent Sprague-Dawley rats". Christina's mentor is Dr. Arturo Zavala in the CLA Department of Psychology.

U-RISE SCHOLARS AT ABRCMS

- Lindsay Odell (U-RISE Year 2 Scholar) presented a poster titled "Conformational Analysis of Reconstituted Discoidal and Spherical High Density Lipoprotein Bearing apolipoprotein E3". Lindsay's faculty mentor is Dr. Vasanthy Narayanaswami.
- **Catherine Palm** (U-RISE Year 1 Scholar) presented a poster titled "Competing Hydrogen Evolution Reaction and Ni Deposition on Au Surfaces". Catherine's faculty mentor is Dr. Hadi Tavassol in the CNSM Department of Chemistry and Biochemistry.
- **Kien Pham** (U-RISE Year 2 Scholar) presented his poster titled "Investigating Pituitary Macrophages Functions in Comparison with Other Tissue-residents via Phagocytic Activity and TLR Ligand Activator". This research was completed over the summer while Kien was at the Nicholas Immunoendocrinology Lab at UC Irvine.
- Oshiana Schenkelberg (U-RISE Year 1 Scholar) won a presentation award in the Cancer Biology category for her presentation titled "Investigating the Effect of 2,6-diarylidene cycloalkanones on Akt and Integrated Stress Response". This research was completed with faculty mentor, Dr. Deepali Bhandari, in the CNSM Department of Chemistry and Biochemistry.
- Audrey Tse (U-RISE Year 1 Scholar) presented a
 poster titled "Lipid-binding Activity of Single Cysteine
 Containing Apolipoprotein AI and Relevance in
 Cardiovascular Disease". Audrey's faculty mentor is
 Dr. Vasanthy Narayanaswami in the CNSM
 Department of Chemistry and Biochemistry.



Oshiana Schenkelberg



SOUTHERN CALIFORNIA CONFERENCES FOR UNDERGRADUATE RESEARCH (SCCUR)

ABOUT SCCUR

<u>SCCUR</u> provides a forum for the presentation of the best research, scholarship, and creative activities of undergraduate students in the region, and encourages communication of innovative achievements across disciplines.

MCNAIR SCHOLARS AT SCCUR

- **Alejandro Duran**: presented research poster titled "The regulation of boltinginduced leaf senescence by the ANAC046 transcription factor in Arabidopsis thaliana".
- **Maylia Brown**: presented an oral presentation on titled "The role of adultification in teacher's academic and social expectations of pubescent Black Girls"
- **Natalie Vega**: presented research poster titled "Fraud protection among Kenner vintage Star Wars Collecting Groups".
- Ali Curiel Silva: presented research poster titled "On the Reproduction and Kinematics of Neurospora crassa Sporulation".
- **Mika Toyama**: presented research poster titled "Learning to be Political: Social Work Students' Political Behaviors".
- **Jacob Nguyen**: presented research poster titled "Intervention Enactment Moderates Prenatal Stress Management Attendance & Adaptive Coping"
- **Viviana Hernandez**: presented research poster titled "CSU Dashboard Spotlights Higher Education Equity Gaps: A Preliminary Exploration of Rhetorical Sensitivity and First-Generation Student Success"
- **Darrell White**: presented an oral presentation titled "Black American Rhetoric in Compton, California"
- Makana Woods: presented research poster titled, "The effects of Miniband Placement Variations on Hip and Knee Range of Motion and Abduction Moments During Sidestep Activities".
- Jose Pineda: presented research poster titled, "Energy Extraction via Magnetic Reconnection in a Rotating Black Hole".

BUILD FELLOW AT SCCUR

• **Calvin Chiu**: presented research an e-poster titled "A Heuristic Evaluation of Usability for the Epocrates Medication and Clinical Decision Tool Application"

U-RISE SCHOLAR AT SCCUR

 Abby Gregorio (U-RISE Year 1 Scholar) presented a poster titled "Investigating Muscle Fiber Formation on dECM-based Scaffolds". Abby's faculty mentor is Dr. Perla Ayala in the COE Department of Biomedical Engineering.



Fall 2024 Newsletter

37TH ANNUAL STUDENT RESEARCH COMPETITION (SRC)

WHAT IS SRC

The purpose of the <u>37th Annual Student Research Competition (SRC)</u> is to showcase excellence in scholarly research, and highlight creative activity conducted by CSULB undergraduate and graduate students. The Student Research Competition will feature oral presentations to an audience of fellow students, university community members, and



a jury of distinguished faculty. The proposal submission deadline for the CSULB SRC is February 3, 2025, at 11:59pm. The competition will take place on Friday, March 7, 2025, at the CSULB College of Business (COB). For more information about applying, participating, or attending, please visit the <u>CSULB SRC Website</u>.

PARTICIPATION ELIGIBILITY

Undergraduate or graduate students currently enrolled at CSULB, as well as alumni/alumnae who receive their degrees in Spring, Summer, or Fall 2022, are eligible. Research and/or creative activities presented should be appropriate to the student's discipline and career goals. Proprietary research is excluded.

<u>APPLY HERE!</u>

RULES & GUIDELINES

The paper summary should not exceed five double-spaced pages in length, not including appendices. Appendices (bibliography, graphs, photographs, or other supplementary materials) should not exceed three pages. File size should not exceed 25mb.

COMPETITION FORMAT

The format is intended to resemble a professional academic meeting and exactly replicates the setting of the statewide competition. Each student will have five minutes to set up their computer for the PowerPoint presentation, eight minutes for an oral presentation and five minutes to respond to questions.

Proposals must be submitted by Monday, February 3, 2025

AA-OURS@CSULB.EDU

SEE YOU IN SPRING 2025!