



The best research, creativity and scholarship from across the CSU

Conrad Prebys  
Aztec Student Union  
April 28-29, 2023



The best research, creativity and scholarship from across the CSU

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# 37th Annual CSU Student Research Competition

April 28 and  
April 29, 2023

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## Event Schedule - Friday, April 28, 2023

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10:00 am - 2:00 pm	Registration	Conrad Prebys Aztec Student Union, Entry Courtyard, 1st Floor
10:00 am - 12:00 pm	Continental Breakfast	Conrad Prebys Aztec Student Union, Montezuma Theater, 2nd Floor
11:15 am - 11:30 am	Opening Remarks	Conrad Prebys Aztec Student Union, Montezuma Theater, 2nd Floor
12:00 pm - 4:00 pm	Student Presentations	Conrad Prebys Aztec Student Union, Love Library, Lipinsky Hospitality Center
4:30 pm - 7:30 pm	Student Reception	Conrad Prebys Aztec Student Union, Aztec Lanes

## Event Schedule - Saturday, April 29, 2023

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7:30 am - 9:30 am	Registration	Conrad Prebys Aztec Student Union, Entry Courtyard, 1st Floor
7:30 am - 9:30 am	Continental Breakfast	Conrad Prebys Aztec Student Union, Montezuma Theater, 2nd Floor
8:30 am - 12:20 pm	Student Presentations	Conrad Prebys Aztec Student Union
12:15 pm - 1:30 pm	Luncheon	Lee & Frank Goldberg Courtyard, Conrad Prebys Aztec Student Union
2:00 pm - 3:00 pm	Awards Ceremony	Conrad Prebys Aztec Student Union, Montezuma Theater, 2nd Floor





**Jolene Koester**  
Interim Chancellor  
The California State University

Welcome to San Diego State University and the 37th Annual CSU Student Research Competition!

This prestigious event showcases excellence in scholarly research and creative activity by recognizing the outstanding achievements of our remarkable students across all 23 CSU universities. Today, we celebrate your ingenuity, limitless curiosity and insatiable drive to unlock doors to new and exciting ideas.

For nearly four decades, the CSU Student Research Competition has provided an opportunity for students like you to demonstrate what you have learned and accomplished in the presence of faculty, outside experts and practitioners, and your peers. The projects highlighted in this year's competition are as diverse as our gifted scholars and span the fields of public health, mathematics, the arts, humanities, sciences, education, business, engineering, social sciences and more.

Research programs across the CSU are uncovering important discoveries and addressing our state's most pressing issues while providing unique opportunities for students to develop new skills, seek a deeper understanding of their fields and foster meaningful relationships that often last a lifetime.

As this is the first time in three years that we've been able to hold this event in person, I encourage you to fully embrace this opportunity to engage with attendees from a multitude of backgrounds and academic disciplines. You will undoubtedly meet like-minded individuals with fresh perspectives who can help refine, expand or further inspire your work.

I also extend my heartfelt gratitude to the faculty and staff at our universities who mentor the CSU's students in their research, scholarship and creative pursuits. You are cultivating the next generation of leaders and innovators whose talents and discoveries will positively impact California, the nation and the world.

Congratulations to all, and best of luck to this year's competitors.

Jolene Koester, Ph.D.

**Adela de la Torre**

President  
San Diego State University

On behalf of the students, faculty, staff and nearly half a million alumni of the San Diego State University community, I welcome you to our beautiful city and campus for the 37th annual California State University Student Research Competition.

It is an especially fitting year for SDSU to host the competition, as our commitment to research has never been stronger. Last year was a record-breaker, with SDSU faculty receiving \$164.5 million in major research grants, a first in our 125-year history. And, this year, we will break ground on a new 1.5-million-square-foot Innovation District at SDSU Mission Valley. It will be a hotbed for research and partnerships with industry-leading businesses, and a launchpad for our students into exciting, meaningful and in-demand careers.

As I look at this year's competition, my excitement and pride extends to all of the student researchers who join us from across the CSU system. I confess that I will be rooting for our SDSU contingent to keep its share of the awards in San Diego, just as I cheer on our Aztecs in every competition. I also recognize, however, that this is an opportunity for us to come together as one CSU to showcase the depth and quality of work taking place in the largest and most diverse higher-education system in the United States. Good luck to you all!

Finally, in welcoming faculty, staff and students to this competition, I know I am speaking to some of the finest educators in the country, and to a group of future community and business leaders who are dedicated to improving themselves and our society. While good-spirited competitions are rewarding on their own, each of you is already worthy of celebration for what brought you here. Your hard work, your dedication, and your critical thought are recognized, and your passion for your subject is evident. I have the highest confidence in each of you.

Congratulations again, and enjoy your time in San Diego.

Adela de la Torre, Ph.D.

**Hala Madanat**

Vice President  
Division of Research and Innovation  
San Diego State University

Welcome to the 37th Annual California State University Student Research Competition! On behalf of the faculty, staff and students at San Diego State University, we are honored to be hosting this showcase of the incredible advancements and exciting ideas that are generated across our state every day.

Behind each undergraduate and graduate student presenting this weekend is a team of faculty, staff, mentors, families, and friends. Their support has shaped these students into researchers and scholars whose findings will undoubtedly create new pieces of art and music, heal communities, protect ecosystems, revolutionize industries and solve perennial puzzles. We thank them for transforming the lives of our scholars.

I would also like to thank Drs. Alicia Kinoshita and Mark B.Reed, as well as Alex Munoz, Kate Hatcher and all the dedicated staff in our Division for Research and Innovation, for the time and energy they devoted to organizing this phenomenal event. Our students would not be able to shine as brightly without them.

Last, but certainly not least, I would like to congratulate all of the participants on their hard work. This competition is not only a chance to celebrate your curiosity and persistence but also a wonderful opportunity to learn from and meet fellow researchers. I hope you enjoy the event and wherever your research may lead you.

Hala Madanat, Ph.D.



## Thi Kieu Trang Dang

Major: Graphic Design

Designed for the 2023 CSU Student Research Competition  
San Diego State University

My name is Thi Kieu Trang Dang, and I am a designer/student based in San Diego. I am originally from Vietnam, and I came to the U.S. to obtain my B.A. in Graphic Design. I specialize in typography, illustration, and digital marketing design. Ever since I was young, I always wanted to follow a creative career, which would eventually lead me to join SDSU. One of the reasons why I pursued a more artistic education was my interest in comic books. I hope to polish my graphic design skills in order to create my comic books in the future.

For this year's CSU Student Research Competition at SDSU, I wanted to create a design that reflects our university and the many fields of study. The CSU logo has the letter "C" modified following the shape and texture of the sun ray, representing California. It also connects to the symbol of the Hepner Hall arch of SDSU. For the poster, it consists of a collage of free form illustrations in combination with icons ranging from science to art, appealing to all subjects and majors across California. The key words consisting of innovation, discovery, experience, etc. are integrated with the illustration in order to clarify the message of the event and to add interest to the illustration.



THE BEST RESEARCH, CREATIVITY AND SCHOLARSHIP  
FROM ACROSS THE CSU.

**APRIL 28-29, 2023**

CONRAD PREBYS AZTEC STUDENT UNION

## Session Overview

<b>Session 1</b>	Health, Nutrition and Clinical Sciences	Graduate	Park Boulevard
<b>Session 2</b>	Engineering and Computer Science	Undergraduate	Mata'yuum
<b>Session 3</b>	Behavioral, Social Sciences and Public Administration	Undergraduate	Legacy Suite
<b>Session 4</b>	Behavioral, Social Sciences and Public Administration	Undergraduate	Love Library 431
<b>Session 5</b>	Biological and Agricultural Sciences	Graduate	Theater, Room 270
<b>Session 6</b>	Biological and Agricultural Sciences	Graduate	Pride Suite
<b>Session 7</b>	Biological and Agricultural Sciences	Undergraduate	Visionary Suite
<b>Session 8</b>	Physical and Mathematical Sciences	Graduate	Metztli
<b>Session 9</b>	Behavioral, Social Sciences, and Public Administration	Graduate	Aztlan
<b>Session 10</b>	Humanities and Letters	Undergraduate	State Suite
<b>Session 11</b>	Education	Graduate	Lipinsky Hospitality Center
<b>Session 12</b>	Education	Undergraduate/Graduate	Presidential Suite
<b>Session 13</b>	Engineering and Computer Science	Undergraduate	Love Library 430
<b>Session 14</b>	Engineering and Computer Science	Graduate	Templo Mayor
<b>Session 15</b>	Business, Economics, and Hospitality Management	Undergraduate/Graduate	State Suite
<b>Session 16</b>	Health, Nutrition, and Clinical Sciences	Undergraduate/Graduate	Templo Mayor
<b>Session 17</b>	Creative Arts & Design	Undergraduate/Graduate	Metztli
<b>Session 18</b>	Behavioral, Social Sciences, and Public Administration	Undergraduate/Graduate	Aztlan
<b>Session 19</b>	Behavioral, Social Sciences and Public Administration	Graduate	Park Boulevard
<b>Session 20</b>	Humanities & Letters	Graduate	Legacy Suite
<b>Session 21</b>	Biological and Agricultural Sciences	Undergraduate	Pride Suite
<b>Session 22</b>	Biological and Agricultural Sciences	Undergraduate	Mata'yuum
<b>Session 23</b>	Physical and Mathematical Sciences	Undergraduate	Theater, Room 270
<b>Session 24</b>	Physical and Mathematical Sciences	Undergraduate	Visionary Suite



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## Sessions

Sessions by  
Campus Delegations

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## Sessions by Campus Delegations

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### California State University, Bakersfield

Alondra Ramirez	Session 11
Gabriel Moore	Session 10
Julnar Al Azzam	Session 7
Manish 'Money' Ghimire	Session 1
Natasha Selene	Session 19
Nora Alammari	Session 4
Sarah Alame	Session 6
Vanessa Beltran	Session 17
Zachery Powell	Session 20

### California State University, Channel Islands

Kaylena Mann	Session 9
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### California State University, Chico

Ashley Brown	Session 22
Christopher Robinson	Session 19
Daniel Papasergia	Session 9
Dylan Sanders	Session 14
Jennifer Miller-James	Session 19
Matthew Wagoner	Session 24
Molly Tuttle	Session 5
Raquel Krach	Session 6
Sam Lloyd-Harry	Session 13
Stephanie Duarte-Amezcu	Session 7

### California State University, Dominguez Hills

Aina Ali	Session 1
Aysa Monae Collins	Session 16
Carlos Zuniga	Session 7
Edmund Arevalo	Session 17
Jennifer Baker	Session 19
Josahandi Cisneros	Session 18
Marco Castañeda Martinez	Session 7
Michael Pinkerton	Session 24
Michelle Mohr	Session 8
Nicole Stephanie Pantaleon	Session 1

Paul Dinh	Session 5
Rebekah Boning	Session 1
Seth AlMBERG	Session 1

### California State University, East Bay

Anandan Saranya	Session 1
Ashley Murray	Session 16
Cassandra Yuan	Session 16
Destiny Mendoza	Session 7
Justin Matties	Session 1
Ria Maharaj	Session 4
Sandra Torres	Session 23
Sepehr Khosravi	Session 3

### California State University, Fresno

Esveidy Ocegüera Nava	Session 5
Giang Huynh	Session 12
Hayley Kumagai	Session 13
Jacqueline Machado	Session 18
Jasmin Banderas	Session 12
John Gutierrez	Session 7
Jose Maldonado	Session 11
Keyara Piri	Session 16
Nadia Lopez	Session 19
Zachary Padilla	Session 21

### California State University, Fullerton

Alondra Cervantes	Session 12
Annabelle Recinos	Session 13
Cindy Le	Session 23
David Ngo	Session 5
Dema Ramlaoui	Session 7
Gio Sanchez	Session 2
Kaitlyn Kern	Session 6
Katherine Heaton	Session 19
Lauren Weiss	Session 17
Mark Rangel	Session 2
Trina Miller	Session 22

**California State Polytechnic University, Humboldt**

Claire Rogers	Session 24
Emma Modrick	Session 23
Giselle Urquijo	Session 13
Hannah Joss	Session 5
Kana Voelckers	Session 13
Katie Hoy	Session 21
Mishell Lopez	Session 16
Rebecca Renee Reibel	Session 21
Skye Hyunjin Choi	Session 1

**California State University, Long Beach**

Gabriela Murrieta	Session 2
Justin Gamoras	Session 15
Kalani Lopez	Session 18
Katrina Jensen	Session 7
Lauren Tran	Session 8
Madeleine Phan	Session 16
Michelle Rivera	Session 20
Mireya Mondragon	Session 2
Raya Torres	Session 10
Ricardo Bazaruto	Session 14
Tuyet-Suong Sabrina Nguyen	Session 11

**California State University, Los Angeles**

Elicet Cifuentes	Session 11
Farzana Yasmin Boby	Session 14
Harry Bevir	Session 5
Hazel Carias-Urbina	Session 10
India Wesley-Cardwell	Session 21
Jin Hyeok Yoon	Session 8
Juan Lindo	Session 1
Katherine Lainez	Session 20
Kayci Hirakawa	Session 3
Kimia Lavasari	Session 4

**California State University, Maritime Academy**

Aurora Thomas	Session 18
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**California State University, Monterey Bay**

Alexandra Yokomizo	Session 7
Angelica May Amita	Session 15
Devon McCauley	Session 4
Isaak Haberman	Session 5
Jherrica Phillips	Session 16
Kimberly Smith	Session 3
Mikaela Kirkpatrick	Session 16
Paige Siegel	Session 21
Pepper St. Clair	Session 22
Rosa Acevedo Duran	Session 3
Savannah Saldana	Session 6
Vasiliki (Kiki) Iden	Session 12

**California State University, Northridge**

Adam McCrory	Session 17
Christian Corvera	Session 14
Christy Rodriguez	Session 3
Diana Ibrahim	Session 21
Jander Cruz	Session 8
Jessica Peria	Session 6
Joseluz Sosa	Session 4
Kate Ridgewell	Session 10
Michelle Anderson	Session 9
Noelle Simpson	Session 9
Yoselin Deleon	Session 3

**California State Polytechnic University, Pomona**

Adrian Cruz	Session 3
Alton Lo	Session 2
Amparo Medina	Session 13
Christian LeRue	Session 8
Christie Jolie Carino	Session 13
Christopher Lai	Session 13
Emily Harrison	Session 3
Erick Delgado	Session 13
Hened Malak	Session 3
Hetkumar Ghadia	Session 13
Joseph Rico	Session 2



Lara Amiri-Kazaz	Session 6
Lauren Natividad	Session 2
Maggie Hoang	Session 13
Matthew Cha	Session 2
Mina Thoresen	Session 23
Nathaniel Hasal	Session 13
Oliver Reynolds	Session 13
Paula Morales	Session 13
Raul Padilla Silvas	Session 24
Stanley Ossyra	Session 13
Tomas Barba	Session 6

### California State University, Sacramento

Carson Marsh	Session 21
Ethan Roberts	Session 11
George Harris	Session 9
Hannah Redhead	Session 23
Jie Liu	Session 20
Julian Hernandez	Session 2
Michael Turgeon	Session 12
Rachel Sedillos	Session 23
Raman Kaur	Session 21
Scott Whitman	Session 6

### California State University, San Bernardino

Ana Bautista	Session 4
Angelique Melendrez	Session 19
Auguste Torres	Session 16
David Lopez Sanchez	Session 9
Delilah Gbur	Session 22
Dia Poole	Session 12
Johnathan Solomon	Session 3
Jordan Taylor	Session 9
Joshua Mondragon	Session 4
Rangel Zarate	Session 11
Serenity Chavez	Session 10
Viviana Alvarez Rodriguez	Session 18

### San Diego State University

Brianna O'Boyle	Session 20
Giovanna Zampa	Session 3
Hana Foo	Session 17
Ila Peeler	Session 5
Kayla Solsbak	Session 20
Kristin Tenney	Session 12
Sara Rodrigue	Session 4
Scarlett Alexander	Session 14
Scott Monahan	Session 21
Tina Marcroft	Session 11

### San Francisco State University

Daniel Dubrovsky	Session 15
Loni Matthew	Session 22
Maia Feinman-Welcher	Session 1
Morgan Buttler	Session 19
Nancy Lagunas	Session 1
Preet Agnihotri	Session 8
Ruth Truman	Session 20
Sara Ucar	Session 11
Steffi Win	Session 14
Sylvia Nwakanma	Session 17

### San José State University

Autumn Galinski	Session 24
Hanan Mubarez	Session 3
Hilary King	Session 20
Iris Schmidt	Session 4
Jaedyn Rollins	Session 6
James Guzman	Session 14
Merlina San Nicolas Leyva	Session 9
Mia Dong	Session 14
Ran Li	Session 8
Surabhi Gupta	Session 14
Yik Haw Teoh	Session 23

### California Polytechnic State University, San Luis Obispo

Ariadne Kaylor	Session 18
Asmita Sharma	Session 14
Ethan Gutterman	Session 10
Fiona O'Neill	Session 21
Iris Bookholtz	Session 21
Jack Madden	Session 5
Jordan Richards	Session 5
Madeleine Goertz	Session 23
Marina Kare	Session 18
Matti Toivola	Session 24
Megan Rottenborn	Session 9
Michael Dalsin	Session 22
Nam Nguyen	Session 14
Olivia Wallin	Session 18
Pranshul Lakhanpal	Session 14
Robin Bedard	Session 9
Squeaky Buentipo	Session 2
Trevor Loe	Session 24
Trevor Hidalgo	Session 24

### California State University, San Marcos

Cristina Velasquez	Session 22
Jaeden Flury	Session 7
Jake Coast	Session 22
Jasmine O'Hara	Session 21
Jessica Keatly	Session 21
Jocelyne Dates	Session 6
Karissa Tran	Session 4
Leah Coe	Session 1
Marielle Castaneda	Session 18
Mason Laurin	Session 22
Minjung Kang	Session 8
Nicolas Morales	Session 16

### Sonoma State University

Anja Damazyn	Session 14
Bryce Jensen	Session 13
David Cheng	Session 2
Gabriela Fleischman	Session 15
Jorge Romero	Session 2
Kendall Hernandez	Session 16
Lily Harmon	Session 24
Natali Luevano	Session 15
Nick Davis	Session 2
Ninoska Gonzalez	Session 15
Noah Mervine	Session 2
Oscar Avendano	Session 2
Rebecca Kopel	Session 6
Ricardo Reyes	Session 15
Sokiyana Naser	Session 14
Sophia Winchell	Session 16
Tyler Whitmarsh	Session 13
Vanessa Reyes	Session 24
Vinicius Souza	Session 5

### Stanislaus State University

Cristian Silva-Toro	Session 3
Heather Collins	Session 4
Jordan Prather	Session 23
Kyle Moll Lee	Session 23



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## **Sessions 1-14**

Friday, April 28

## **Sessions 15-24**

Saturday, April 29

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## Friday, April 28, 2023

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### Session 1

#### Health, Nutrition, and Clinical Sciences, Graduate

Location/Room: Park Boulevard, 1st Floor, Conrad Prebys Student Union

- 12:00 pm**     **Nancy Lagunas**, *San Francisco State University*  
Early Childhood Stress Response and Mental Health during COVID-19
- 12:20 pm**     **Maia Feinman-Welcher**, *San Francisco State University*  
Intimate Partner Violence Rates Among College Students: Comparison by Demographic Groups at SFSU and a National Sample of Universities
- 12:40 pm**     **Rebekah Boning, Nicole Stephanie Pantaleon**, *CSU Dominguez Hills*  
Behind the Mask: Impression Management in Women With ADHD
- 1:00 pm**       **Aina Ali, Seth AlMBERG**, *CSU Dominguez Hills*  
A Powerful Form of Resistance”: Mindfulness and Personal Relationships in the LGBTQ+ Population
- 1:20 pm**       **Manish ‘Money’ Ghimire**, *CSU Bakersfield*  
Repeated remote ischemic preconditioning attenuates arterial stiffness and hemodynamic measures in healthy young prehypertensive adults
- 1:40 pm**       **BREAK**
- 2:00 pm**       **Skye Hyunjin Choi**, *Cal Poly Humboldt*  
Absolute And Relative Reference Values of College-Aged Men And Women for the YMCA Bench Press Test for Muscular Endurance
- 2:20 pm**       **Justin Matties**, *CSU East Bay*  
A Pilot Study: Effects of an 8-week training intervention in carbon-plated running shoes
- 2:40 pm**       **Anandan Saranya**, *CSU East Bay*  
Reminder – A Digital Assistant Designed To Aid People With Dementia/Alzheimer’s Disease
- 3:00 pm**       **Juan Lindo**, *Cal State Los Angeles*  
“I’m Sorry You Feel That Way But That Wasn’t My Intention”: How to Apologize with Cultural Humility
- 3:20 pm**       **Leah Coe**, *CSU San Marcos*  
Sex differences in hemodynamic response to high intensity interval exercise (HIIE)

## Friday, April 28, 2023

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### Session 2

#### Engineering and Computer Science, Undergraduate

Location/Room: Mata’yuum, 2nd Floor, Conrad Prebys Aztec Student Union

- 12:00 pm**     **Alton Lo, Matthew Cha, Joseph Rico**, *California State Polytechnic University, Pomona*  
Technology Demonstrator for the Research of High Endurance and Regenerative UAVs

- 12:20 pm**     **Noah Mervine, David Cheng, Nick Davis**, *Sonoma State University*  
Smooth Power
- 12:40 pm**     **Mark Rangel, Gio Sanchez**, *CSU Fullerton*  
Study on Smart Reconfigurable Drone Technology for Search and Rescue in Natural
- 1:00 pm**        **Julian Hernandez**, *Sacramento State*  
Searching for Litter with Computer Vision
- 1:20 pm**        **Gabriela Murrieta, Mireya Mondragon**, *CSU Long Beach*  
Expandable Catheter-Deployable Impeller for Computational Fluid Dynamics Simulation
- 1:40 pm**        **BREAK**
- 2:00 pm**        **Squeaky Buentipo**, *California Polytechnic State University, San Luis Obispo*  
Fabrication and Characterization of Electrospun “Blood Vessel Mimic” Scaffolds
- 2:20 pm**        **Jorge Romero, Oscar Avendano**, *Sonoma State University*  
EMOTE: A Wearable Device for Emotion Estimation and Classification
- 2:40 pm**        **Lauren Natividad**, *California State Polytechnic University, Pomona*  
Energy Poverty and Social Benefit Factors: A MOLP Approach for the Design of a HRES  
Developed for a Rural Village in Mexico

## Friday, April 28, 2023

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### Session 3

#### Behavioral, Social Sciences and Public Administration, Undergraduate

Location/Room: Legacy Suite, 3rd Floor, Conrad Prebys Aztec Student Union

- 12:00 pm**     **Hanan Mubarez**, *San José State University*  
The Impact of Social Media Usage on Ethnic identity and its Relationship With Perceived Racial Discrimination
- 12:20 pm**     **Sepehr Khosravi**, *CSU East Bay*  
Qualitative Study of Body Image and Culture Among Iranian-Americans
- 12:40 pm**     **Cristian Silva-Toro**, *Stanislaus State University*  
Criminal Justice or Public Health: An Analysis of California Central Valley’s Approach to Drug Addiction
- 1:00 pm**        **Johnathan Solomon**, *CSU San Bernardino*  
The River’s Retribution: Policy Impact Analysis of the QSA on a Dying Sea
- 1:20 pm**        **Giovanna Zampa**, *San Diego State University*  
Development and deployment of a comprehensive social survey to understand public restroom access and related health concerns among San Diegans experiencing homelessness
- 1:40 pm**        **BREAK**

- 2:00 pm**     **Kayci Hirakawa**, *Cal State Los Angeles*  
The Neuronal Measures of Auditory Processing in Speech Differentiation between English Monolinguals and Spanish-English Bilinguals
- 2:20 pm**     **Christy Rodriguez, Yoselin Deleon**, *CSU Northridge*  
The Relationship Between Perceived Stress and Body Fat Among Minority Students During the Transition to College
- 2:40 pm**     **Rosa Acevedo Duran, Kimberly Smith**, *CSU Monterey Bay*  
Understanding Youth Mental Health Needs Through Participatory Action Research
- 3 :00 pm**     **Hened Malak, Adrian Cruz, Emily Harrison**, *California State Polytechnic University, Pomona*  
How Do Consumers Form Their Intentions to Wear a Mask During Their Stay in Coffee Shops?

## Friday, April 28, 2023

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### Session 4

#### Behavioral, Social Sciences and Public Administration, Undergraduate

Location/Room: Love Library 431 (LL431)

- 12:00 pm**     **Iris Schmidt**, *San José State University*  
Substance Use Patterns Among College Students at San Jose State University: A Study on Ethnicity, Substance Type and Frequency, and Living Arrangements
- 12:20 pm**     **Kimia Lavasari**, *Cal State Los Angeles*  
Exploring Juror's Qualitative Verdict Justifications Based on Jury Instructions
- 12:40 pm**     **Sara Rodrigue**, *San Diego State University*  
Creating a Scorecard for Public Restrooms in San Diego County to Address Accessibility, Cleanliness, and Safety
- 1:00 pm**     **Joseluz Sosa**, *CSU Northridge*  
The Unhoused of San Fernando Valley: Linguistic Distance and Assessment
- 1:20 pm**     **BREAK**
- 1:40 pm**     **Ria Maharaj**, *CSU East Bay*  
Understanding Potential Influence of Social, Cultural, and Historical Traumas & Resiliencies on Health of Diverse South Asian Communities in California
- 2:00 pm**     **Devon McCauley**, *CSU Monterey Bay*  
Adoption as Ongoing Settler Colonialism: A Genealogy of Severance and Domination
- 2:20 pm**     **Joshua Mondragon, Ana Bautista**, *CSU San Bernardino*  
Afrolatine California
- 2:40 pm**     **Heather Collins**, *Stanislaus State University*  
Ethnogeology and Interdisciplinary Approaches

- 3:00 pm**     **Nora Alammari, CSU Bakersfield**  
Effects of sucrose exposure during the adolescent period on operant novelty seeking in male and female rats
- 3:20 pm**     **Karissa Tran, CSU San Marcos**  
Age of first cannabis use and misuse linked for men and women and explained by depressive symptoms among U.S. young adults

## Friday, April 28, 2023

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### Session 5

#### Biological and Agricultural Sciences, Graduate

Location/Room: Theater, Room 270, 2nd Floor, Conrad Prebys Aztec Student Union

- 12:00 pm**     **Harry Bevir, Cal State Los Angeles**  
Dynamic localization of circadian clock proteins Rbp2 and KaiB in Cyanobacteria
- 12:20 pm**     **Hannah Joss, Cal Poly Humboldt**  
Quantifying the effect of tidal conditions on the remote detection of bull kelp in Trinidad Bay, California
- 12:40 pm**     **Paul Dinh, CSU Dominguez Hills**  
The effects of fragment size and temperature on coral calcification rates
- 1:00 pm**     **Molly Tuttle, CSU Chico**  
Flattening the Curve: A Covid-19 Wastewater Story
- 1:20 pm**     **Ila Peeler, San Diego State University**  
Understanding the Metabolism of Recently Isolated Infectious Bacterium, *Bordatella atropi*
- 1:40 pm**     **David Ngo, CSU Fullerton**  
Antibiotic resistance
- 2:00 pm**     **BREAK**
- 2:20 pm**     **Jordan Richards, Jack Madden, California Polytechnic State University, San Luis Obispo**  
Valorization of Carrot Processing Waste
- 2:40 pm**     **Vinicius Souza, Sonoma State University**  
Population and Community Assembly Patterns Related to Remnant Bull Kelp (*Nereocystis luetkeana*) Forests Following a Catastrophic Decline
- 3:00 pm**     **Isaak Haberman, CSU Monterey Bay**  
Disparities in Drivers of Subtidal and Intertidal Sea Urchin Reproductive Capacity
- 3:20 pm**     **Esveidy Oceguera Nava, CSU Fresno**  
Synthesis of tetracyclic bis-piperidine alkaloids as potential anticancer agents

## Friday, April 28, 2023

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### Session 6

#### Biological and Agricultural Sciences, Graduate

Location/Room: Pride Suite, 1st Floor Conrad Prebys Aztec Student Union

- 12:00 pm**     **Kaitlyn Kern, CSU Fullerton**  
A Morphological Investigation of the Holocephalan Tenaculum Through Ecology
- 12:20 pm**     **Savannah Saldana, CSU Monterey Bay**  
Effects of *Arundo donax* Removal on Aerial Invertebrates along the Salinas River, Monterey
- 12:40 pm**     **Rebecca Kopel, Sonoma State University**  
Utilizing Benthic Macroinvertebrates to Assess Ecological Status of Urbanized Northern California Freshwater Ecosystems
- 1:00 pm**     **Jessica Peria, CSU Northridge**  
Seasonal Movement of Giant Sea Bass (*Stereolepis Gigas*) within the Southern California Bight
- 1:20 pm**     **Lara Amiri-Kazaz, Tomas Barba, California State Polytechnic University, Pomona**  
The Valorization of Pistachio Shells as an Alternative for Perlite and Vermiculite in Greenhouse Basil Production
- 1:40 pm**     **BREAK**
- 2:00 pm**     **Jaedyn Rollins, San José State University**  
Utilization of the RhD locus as a safe harbor for gene editing applications
- 2:20 pm**     **Jocelyne Dates, CSU San Marcos**  
Voltage-gated ion channels regulate ion and fluid transport in the Malpighian tubules of the Common Cabbage Looper larvae *Trichoplusia ni*
- 2:40 pm**     **Sarah Alame, CSU Bakersfield**  
The allelopathic effects of bracken fern, *Pteridium aquilinum*, on interspecific interactions
- 3:00 pm**     **Scott Whitman, Sacramento State**  
Patterns of Cooccurrence and Body Size of Vernal Pool Tadpole Shrimp (*Lepidurus packardii*) and California Tiger Salamander (*Ambystoma californiense*)
- 3:20 pm**     **Raquel Krach, CSU Chico**  
Impact of Compost and Multispecies Cover Crop on Almond Production and Soil Health

## Friday, April 28, 2023

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### Session 7

#### Biological and Agricultural Sciences, Undergraduate

Location/Room: Visionary Suite, 3rd Floor, Conrad Prebys Aztec Student Union

- 12:00 pm**     **Alexandra Yokomizo, CSU Monterey Bay**  
Revealing How Wildfires Can Affect River Sediments and Chemistry during Droughts and after Precipitation



- 12:20 pm**     **Jaeden Flury, CSU San Marcos**  
Investigating wound microbiome composition in Type 2 Diabetic mice
- 12:40 pm**     **John Gutierrez, CSU Fresno**  
Encapsulation of gold nanoparticles into protein cages through genetically modified viral proteins
- 1:00 pm**        **Dema Ramlaoui, CSU Fullerton**  
Lactic Acid Bacteria Lacticaseibacillus rhamnosus “R3” Inhibitory Activity Against ESKAPE
- 1:20 pm**        **Katrina Jensen, CSU Long Beach**  
The Synthesis and Inhibition of Fmoc-Lys (CH<sub>3</sub>) 2-O - in Butyrylcholinesterase and Acetylcholinesterase
- 1:40 pm**        **BREAK**
- 2:00 pm**        **Julnar Al Azzam, CSU Bakersfield**  
Investigation into Enzymatic Sulfur Reduction in Fossil Fuels
- 2:20 pm**        **Destiny Mendoza, CSU East Bay**  
Effects of selective mowing of invasive grasses on pollinator diversity in a California oak savanna environment
- 2:40 pm**        **Stephanie Duarte-Amezcuca, CSU Chico**  
Evidence That the Brain Is Involved In Idiopathic Scoliosis
- 3:00 pm**        **Marco Castañeda Martinez, Carlos Zuniga, CSU Dominguez Hills**  
Investigating climate-growth relationships with Pinus jeffreyi in the San Jacinto mountains

## Friday, April 28, 2023

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### Session 8

#### Physical and Mathematical Sciences, Graduate

Location/Room: Metztli, 2nd Floor, Conrad Prebys Aztec Student Union

- 12:00 pm**     **Jander Cruz, CSU Northridge**  
Investigating Nanoscale Molecular Distributions In Patterning Materials with NP-SIMS
- 12:20 pm**     **Christian LeRue, California State Polytechnic University, Pomona**  
Synthesis/Characterization of NHC Lanthanide Nitrosyl Complexes for Reduction of Greenhouse Gases
- 12:40 pm**     **Preet Agnihotri, San Francisco State University**  
Giant Radio Galaxies in MeerKAT legacy surveys
- 1:00 pm**        **Michelle Mohr, CSU Dominguez Hills**  
Changes in recent summer temperatures are influencing the radial growth of Pinus Ponderosa in Prescott National Forest, Arizona
- 1:20 pm**        **BREAK**

- 1:40 pm**     **Lauren Tran**, *CSU Long Beach*  
Identification and Validation of Prognostic Genomic Predictive Signature for Lung Cancer Patients in Personalized Medicine
- 2:00 pm**     **Ran Li**, *San José State University*  
On The Memory Scalability of Spectral Clustering Algorithms
- 2:20 pm**     **Jin Hyeok Yoon**, *Cal State Los Angeles*  
Regiochemistry of the Singlet Oxygen Ene Reaction in Metal-Organic Frameworks
- 2:40 pm**     **Minjung Kang**, *CSU San Marcos*  
The saturation spectrum of add cycles

## Friday, April 28, 2023

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### Session 9

#### Behavioral, Social Sciences, and Public Administration, Graduate

Location/Room: Aztlan, 2nd Floor, Conrad Prebys Aztec Student Union

- 12:00 pm**     **Daniel Papasergia**, *CSU Chico*  
Examining the Consequences of Adolescent Benzodiazepine Exposure
- 12:20 pm**     **David Lopez Sanchez, Jordan Taylor**, *CSU San Bernardino*  
Single-trial fentanyl sensitization and conditioned activity in juvenile rats
- 12:40 pm**     **Robin Bedard, Megan Rottenborn**, *California Polytechnic State University, San Luis Obispo*  
Snake Relocation Policies and Practices within the Continental United States
- 1:00 pm**     **BREAK**
- 1:40 pm**     **Merlina San Nicolas Leyva**, *San José State University*  
A Study of Mexican Journalists' Professional Practices and Fact-Checking Habits During Misinformation and Anti-Press Times
- 2:00 pm**     **Michelle Anderson, Noelle Simpson**, *CSU Northridge*  
Experiences of Deaf/Hard of Hearing Youth in the Child Welfare System
- 2:20 pm**     **Kaylena Mann**, *CSU Channel Islands*  
Creation of the LGBTQ+ Loneliness Scale: Importance of Inclusivity in Research
- 2:40 pm**     **George Harris**, *Sacramento State*  
Photo-ID Law's Impact on Africa-American Turnout Rates: An Extensive Report on Voter, Suppression Within the American Democracy

## Friday, April 28, 2023

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### Session 10

#### Humanities and Letters, Undergraduate

Location/Room: State Suite, 3rd Floor Conrade Prebys Aztec Student Union

- 12:00 pm**     **Gabriel Moore**, *CSU Bakersfield*  
Two Chinatowns With Only an Alley Left
- 12:20 pm**     **Raya Torres**, *CSU Long Beach*  
Importance of Radio Journalism During and After the Japanese Attack on Pearl Harbor
- 12:40 pm**     **Hazel Carias-Urbina**, *Cal State Los Angeles*  
Conspirando en Los Angeles: History of Central American Organizing at MacArthur Park
- 1:00 pm**        **BREAK**
- 1:20 pm**        **Kate Ridgewell**, *CSU Northridge*  
The Cost of Culture: Inequality in Museum Curation and Archives
- 1:40 pm**        **Serenity Chavez**, *CSU San Bernardino*  
An Unsatisfying Remedy for Nihilism
- 2:00 pm**        **Ethan Gutterman**, *California Polytechnic State University, San Luis Obispo*  
Special Collections at Kennedy Library: The Historic Black Community of San Luis Obispo

## Friday, April 28, 2023

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### Session 11

#### Education, Graduate

Location/Room: Lipinsky Hospitality Center, 1608 Student Services West

- 12:00 pm**     **Alondra Ramirez**, *CSU Bakersfield*  
Supporting STEM majors with an interest in pursuing careers in teaching
- 12:20 pm**     **Jose Maldonado**, *CSU Fresno*  
Fostering Familismo: Creating Community to Support Transfer Students
- 12:40 pm**     **Tuyet-Suong Sabrina Nguyen**, *CSU Long Beach*  
Asian American and Pacific Islander Social Justice Attitudes
- 1:00 pm**        **Ethan Roberts**, *Sacramento State*  
Using the Science of Team Science to Foster Faculty Collaborations Across Diverse Disciplines and Institutions
- 1:20 pm**        **BREAK**
- 1:40 pm**        **Rangel Zarate**, *CSU San Bernardino*  
From the Lens of (In)Visibility: A Photovoice Inquiry Into How Community Colleges Can Advance Filipino/a/x American Student Resilience

- 2:00 pm**     **Tina Marcroft**, *San Diego State University*  
Exploring Expert and Novice Understanding of Organismal Relatedness
- 2:20 pm**     **Elicet Cifuentes**, *Cal State Los Angeles*  
Critical health education: Using a cultural lens to teach young Latina girls about body image
- 2:40 pm**     **Sara Ucar**, *San Francisco State University*  
The Power of Stories to Reimagine Disability: Representation in ECSE Classrooms

## Friday, April 28, 2023

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### Session 12

#### Education, Undergraduate (U) and Graduate (G)

Location/Room: Presidential Suite, 3rd Floor Conrade Prebys Aztec Student Union

- 12:00 pm**     **Michael Turgeon**, *Sacramento State (G)*  
The Effect of Local Pollution Exposure on Academic Achievement in California
- 12:20 pm**     **Jasmin Banderas, Giang Huynh**, *CSU Fresno (G)*  
Pride or Pressure: First-Generation First-time Freshmen and their College Identity Amidst the COVID-19 Pandemic
- 12:40 pm**     **Kristen Tenney**, *San Diego State University (G)*  
The Psychological Needs of an Undergraduate Computer Scientist: Three Case Studies
- 1:00 pm**     **BREAK**
- 1:20 pm**     **Dia Poole**, *CSU San Bernardino (G)*  
Connecting Students with Community-Based Organizations for Informal, Short-Term Experiential Learning Opportunities: A Portal Proposal for CSUSB
- 1:40 pm**     **Vasiliki (Kiki) Iden**, *CSU Monterey Bay (U)*  
Modeling the Majority: Bridging Purpose with Practicality
- 2:00 pm**     **Alondra Cervantes**, *CSU Fullerton (U)*  
Latina Mother's Understanding of Common Core State Standards

## Friday, April 28, 2023

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### Session 13

#### Engineering and Computer Science, Undergraduate

Location/Room: Love Library 430 (LL430)

- 12:00 pm**     **Christopher Lai, Maggie Hoang**, *California State Polytechnic University, Pomona*  
Battery As iNtegrated Structure High Endurance Experimental UAV (BANSHEE UAV)
- 12:20 pm**     **Hetkumar Ghadia, Stanley Ossyra**, *California State Polytechnic University, Pomona*  
Design and Analysis of a Novel Tandem Wing e-VTOL Aircraft for Urban Aerial Mobility

- 12:40 pm**     **Bryce Jensen**, *Sonoma State University*  
Cooperative Landing for Unmanned Aerial and Ground Vehicles
- 1:00 pm**     **Tyler Whitmarsh**, *Sonoma State University*  
Predicting Canopy Damage in Sonoma County using Convolutional Neural Networks
- 1:20 pm**     **Annabelle Recinos**, *CSU Fullerton*  
Computation of Corrosion Initiation Time for Zeolite Based High-Performance Concrete (HPC) and High-Quality Rebars
- 1:40 pm**     **BREAK**
- 2:00 pm**     **Hayley Kumagai**, *CSU Fresno*  
Thermal Therapy Treatments for Tremors
- 2:20 pm**     **Giselle Urquijo, Kana Voelckers**, *Cal Poly Humboldt*  
CBDS: A Coding-Based Data Storage for Improving Write Energy and Lifetime in Phase Change Memories
- 2:40 pm**     **Sam Lloyd-Harry**, *CSU Chico*  
Effect of Temperature on the Mechanical Properties of PEGDA-Hydrogels at Various Concentrations
- 3:00 pm**     **Oliver Reynolds, Christie Jolie Carino, Erick Delgado, Nathaniel Hasal, Amparo Medina, Paula Morales**, *California State Polytechnic University, Pomona*  
Environmental Remediation of Surface Water Bodies in California

## Friday, April 28, 2023

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### Session 14

#### Engineering and Computer Science, Graduate

Location/Room: Templo Mayor, 2nd Floor, Conrad Prebys Aztec Student Union

- 12:00 pm**     **Sokiyna Naser, Anja Damazyn**, *Sonoma State University*  
Non-Invasive Blood Glucose Monitoring using Breath Volatile Organic Compounds
- 12:20 pm**     **James Guzman, Surabhi Gupta**, *San José State University*  
Deep Learning in AI Medical Imaging for Stroke Diagnosis
- 12:40 pm**     **Ricardo Bazarro**, *CSU Long Beach*  
CMOS PPG Sensor with Correcting Feedback for Effects of Skin Pigmentation
- 1:00 pm**     **Scarlett Alexander**, *San Diego State University*  
Life Cycle Assessment: Cradle-to-Grave Carbon Dioxide Emissions of BEV and PHEV
- 1:20 pm**     **Farzana Yasmin Bobby**, *Cal State Los Angeles*  
Comparison of activity classification performance based on internal and external accelerometry for stimulation-based Parkinson's disease therapy
- 2:00 pm**     **BREAK**

- 2:20 pm**     **Nam Nguyen, Pranshul Lakhanpal, Asmita Sharma**, *California Polytechnic State University, San Luis Obispo*  
Gaze Detection for Drivers to Monitor Distracted Driving
- 2:40 pm**     **Dylan Sanders**, *CSU Chico*  
Rice Straw Composite Filament
- 3:00 pm**     **Christian Corvera**, *CSU Northridge*  
Comparison of Pure Crossflow, Pure Jet Impingement, and Jet-In-Crossflow Configurations for Applications in Electronics Hotspot Cooling
- 3:20 pm**     **Steffi Win**, *San Francisco State University*  
Seismic Performance of Tiny Houses on Experimental Tests and Computational Analysis
- 3:40 pm**     **Mia Dong**, *San José State University*  
Investigating the Effects of Adaptive Driving Styles on Trust in Partially Automated Vehicles

## Saturday, April 29, 2023

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### Session 15

#### Business, Economics, and Hospitality Management, Undergraduate (U) and Graduate (G)

Location/Room: State Suite, 3rd Floor Conrade Prebys Aztec Student Union

- 10:00 am**     **Daniel Dubrovsky**, *San Francisco State University (G)*  
Markup Madness!
- 10:20 am**     **Justin Gamoras**, *CSU Long Beach (U)*  
Application of Economic Game Theory and Nash-Q Reinforcement Learning in Studying Data Preservation Sensor Nodes
- 10:40 am**     **Angelica May Amita**, *CSU Monterey Bay (U)*  
Social Impacts of Co-Branding and Public Service Announcements Messaging
- 11:00 am**     **Ricardo Reyes, Ninoska Gonzalez, Gabriela Fleischman, Natali Luevano**, *Sonoma State University (U)*  
Impact of Diversity on Perceived Brand Equity and Wine Quality

## Saturday, April 29, 2023

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### Session 16

#### Health, Nutrition, and Clinical Sciences, Undergraduate (U) and Graduate (G)

Location/Room: Templo Mayor, 2nd Floor Conrade Prebys Aztec Student Union

- 9:00 am**     **Auguste Torres**, *CSU San Bernardino (U)*  
Bone Turnover Markers Responses to Acute Resistance Exercise in Postmenopausal Women
- 9:20 am**     **Mishell Lopez**, *Cal Poly Humboldt (G)*  
Rural Older Adult Fall Risk and Prevention Needs: A descriptive and visual analysis of the North Coast Fall Prevention Survey Data

- 9:40 am**     **Keyara Piri, CSU Fresno (U)**  
Development of Dehydroabietylamine Derivatives for Potential Therapeutics for Prostate Cancer
- 10:00 am**     **Kendall Hernandez, Sophia Winchell, Sonoma State University (U)**  
Effectiveness of Attentional Focus on a Pirouette Skill in Both Novice and Skilled Dancers
- 10:20 am**     **BREAK**
- 10:40 am**     **Mikaela Kirkpatrick, Jherrica Phillips, CSU Monterey Bay (U)**  
Effect of Extended Run Time on Load-Voltage Relationship in S-Type Load Cells
- 11:00 am**     **Aysa Monae Collins, CSU Dominguez Hills (U)**  
The Impact of Maternal Pregnancy Complications and Prenatal Care on Infant Mortality
- 11:20 am**     **Madeleine Phan, CSU Long Beach (U)**  
Examining Level of Behavioral Support in a Mobile Health (mHealth) Exercise Intervention for Cardiometabolic Disease Based on Participants Exercise Adherence
- 11:40 am**     **Nicolas Morales, CSU San Marcos (U)**  
Assessing compliance to in-person tobacco sales requirements in San Diego County
- 12:00 pm**     **Ashley Murray, Cassandra Yuan, CSU East Bay (U)**  
Simultaneous inhibition of sEH and FAAH alleviates inflammatory pain in male rats

## Saturday, April 29, 2023

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### Session 17

#### Creative Arts & Design, Undergraduate (U) and Graduate (G)

Location/Room: Metztli, 2nd Floor, Conrad Prebys Aztec Student Union

- 9:30 am**     **Sylvia Nwakanma, San Francisco State University (G)**  
Statistical Inquiry Through Comics
- 9:50 am**     **Lauren Weiss, CSU Fullerton (G)**  
The Aaron M. and Clara Weitzenhoffer Art Collection: Provenance of Select Works
- 10:10 am**     **Adam McCrory, CSU Northridge (G)**  
Opera in the Time of COVID: Creating “Gianni Schicchi, An Animated Opera”
- 10:20 am**     **BREAK**
- 10:40 am**     **Vanessa Beltran, CSU Bakersfield (U)**  
When I Was Your Age
- 11:00 am**     **Edmund Arevalo, CSU Dominguez Hills (U)**  
Family Ties
- 11:20 am**     **Hana Foo, San Diego State University (U)**  
Gemstone Apothecary

## Saturday, April 29, 2023

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### Session 18

#### Behavioral, Social Sciences, and Public Administration, Undergraduate (U) and Graduate (G)

Location/Room: Aztlan, 2nd Floor, Conrad Prebys Aztec Student Union

- 9:30 am**     **Marina Kare, Olivia Wallin, Ariadne Kaylor**, *California Polytechnic State University, San Luis Obispo (U)*  
Codependency, Internalizing Symptoms, and Relationship Dissolution in Emerging Adulthood
- 9:50 am**     **Viviana Alvarez Rodriguez**, *CSU San Bernardino (U)*  
From Classrooms to Photo Albums: Examining the Scope of Afro-Descendant Student Activism in Veracruz, Mexico
- 10:10 am**    **Jacqueline Machado**, *CSU Fresno (U)*  
How do gender, race, and the use of coercion by officers affect police-citizen interactions
- 10:30 am**    **Aurora Thomas**, *Maritime Academy (U)*  
Automatic Identification System (AIS) Manipulation Motivations in the Maritime Domain
- 10:50 am**    **BREAK**
- 11:10 am**    **Marielle Castaneda**, *CSU San Marcos (G)*  
Effects of Repeated Exposure to Animals in Anthropomorphic Contexts
- 11:30 am**    **Kalani Lopez**, *Long Beach (U)*  
Evaluating Guides: Results from Officer Focus Group
- 11:50 am**    **Josahandi Cisneros**, *CSU Dominguez Hills (U)*  
Higher Education and the Automation of Inequality

## Saturday, April 29, 2023

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### Session 19

#### Behavioral, Social Sciences and Public Administration, Graduate

Location/Room: Park Boulevard, 1st Floor, Conrad Prebys Student Union

- 8:50 am**     **Morgan Butler**, *San Francisco State University*  
Watching Protests Unfold: An Analysis of Visual Framing in Live Bay Area Broadcast News Coverage of Black Lives Matter Protests
- 9:10 am**     **Jennifer Baker**, *CSU Dominguez Hills*  
Supporting Positive Mother-Infant Interactions among Adolescent and Young Adult Mothers
- 9:30 am**     **Nadia Lopez**, *CSU Fresno*  
Health Care Workers' Experiences of Burnout and Resilience During the Covid-19 Pandemic
- 9:50 am**     **Katherine Heaton**, *CSU Fullerton*  
Bans off my Body: Abortion Rights Movement on Twitter Following the Overruling of Roe v. Wade
- 10:10 am**    **BREAK**



- 10:30 am**     **Natasha Selene**, *CSU Bakersfield*  
Exploring Men's Ideal Self
- 10:50 am**     **Angelique Melendrez**, *CSU San Bernardino*  
Virtue Signaling: Do You Really Care?
- 11:10 am**     **Christopher Robinson**, *CSU Chico*  
Child Welfare Social Worker Retention: The Relationship of Secondary Trauma and Pandemic Stressors
- 11:30 am**     **Jennifer Miller-James**, *CSU Chico*  
Social Factors that Affect the Lived Experience of Birthing People

## Saturday, April 29, 2023

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### Session 20

#### Humanities & Letters, Graduate

Location/Room: Legacy Suite, 3rd Floor, Conrad Prebys Aztec Student Union

- 9:00 am**     **Ruth Truman**, *San Francisco State University*  
Priscilla Prude and the Lusting Lout: The Sexual Revolution Versus the Regulation of Women's Sexuality at SF State 1969-1972
- 9:20 am**     **Kayla Solsbak**, *San Diego State University*  
"The Feminine Presence": Gender Discourse in the United Farm Workers' Newspaper
- 9:40 am**     **Zachery Powell**, *CSU Bakersfield*  
Behind the Science of Conservation: Muir's Similarities and Differences to Contemporaries
- 10:00 am**     **Brianna O'Boyle**, *San Diego State University*  
WeChat Usage and Emoji Ratings: How usage of the social media platform WeChat influences the ratings of emojis from WeChat
- 10:20 am**     **BREAK**
- 10:40 am**     **Michelle Rivera**, *CSU Long Beach*  
Ask Camila: Racial and Ethnic Tensions in John Fante's Ask the Dust
- 11:00 am**     **Hiliary King**, *San José State University*  
Trees to Paradise: Using Poetry to Explore How California's Arboreal History Reflects Its Eco and Social Cultures and Histories
- 11:20 am**     **Jie Liu**, *Sacramento State*  
On Emily Dickinson's Use of Carnal Language to Depict Immortality
- 11:40 am**     **Katherine Lainez**, *Cal State Los Angeles*  
The Erosion of Family Caused by 'Land Grabbing' in Honduras: Migration, Gendered Expectations, and those left-behind in Honduras

## Saturday, April 29, 2023

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### Session 21

#### Biological and Agricultural Sciences, Undergraduate

Location/Room: Pride Suite, 1st Floor Conrad Prebys Aztec Student Union

- 8:30 am**     **Jasmine O'Hara, Jessica Keatly, CSU San Marcos**  
Camera Trap Survey of Insect pollinators of Encinitas Baccharis (*Baccharis vanessae*) in San Diego, California
- 8:50 am**     **Scott Monahan, San Diego State University**  
Population Genomics of the Invasive Pink Rice Borer Moth, *Sesemia inferens*
- 9:10 am**     **Iris Bookholtz, Fiona O'Neill, California Polytechnic State University, San Luis Obispo**  
Abiotic & Biotic Constraints on Blue Oak Woodland Restoration in the Sierra Foothills
- 9:30 am**     **Diana Ibrahim, CSU Northridge**  
Modeling the Emergence of Neural Network Dysfunction in Rett Syndrome with Mosaic Organoids
- 9:50 am**     **Katie Hoy, Rebecca Renee Reibel, Cal Poly Humboldt**  
The Dynamics of Upwelling-Driven Biological Productivity Along the Trinidad Head Line, California
- 10:10 am**     **BREAK**
- 10:30 am**     **Carson Marsh, Raman Kaur, Sacramento State**  
Kismet Affects the Gut Microbiome in *Drosophila Melanogaster*
- 10:50 am**     **Paige Siegel, CSU Monterey Bay**  
Mapping the Stars: Understanding the Spatial Variability of Sea Stars along the Monterey Peninsula
- 11:10 am**     **India Wesley-Cardwell, Cal State Los Angeles**  
Development of a protocol to assess the antimycobacterial activity of lung epithelial cells
- 11:30 am**     **Zachary Padilla, CSU Fresno**  
Malaria prevalence in overwintering ground sparrows of the Central Valley of California

## Saturday, April 29, 2023

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### Session 22

#### Biological and Agricultural Sciences, Undergraduate

Location/Room: Mata'yuum, 2nd Floor, Conrad Prebys Aztec Student Union

- 9:00 am**     **Michael Dalsin, California Polytechnic State University, San Luis Obispo**  
Drivers of Nearshore Marine Heatwaves and Cold Spells in the California Current
- 9:20 am**     **Ashley Brown, CSU Chico**  
Exploring the Effects of Proprioception on Idiopathic Scoliosis
- 9:40 am**     **Pepper St. Clair, CSU Monterey Bay**  
Analysis of Antibiotic Pressure on Conjugation Efficiency of Antimicrobial Resistance Genes in *E.coli*

- 10:00 am**     **Loni Matthew**, *San Francisco State University*  
Dig This: Increase in Temperature and Plastic Ingestion put Crabs at Physiological Risk
- 10:20 am**     **BREAK**
- 10:40 am**     **Delilah Gbur**, *CSU San Bernardino*  
Effect of Heat Shock Treatment on the Lifespan and Healthspan of Transgenic A $\beta$ 42 *Drosophila melanogaster*
- 11:00 am**     **Trina Miller**, *CSU Fullerton*  
Talking Trash- categorizing and quantifying marine debris on the rocky shores of San Pedro, CA
- 11:00 am**     **Cristina Velasquez, Jake Coast**, *CSU San Marcos*  
Identification of BST2 as a biomarker of alopecia areata in both mice and humans
- 11:40 am**     **Mason Laurin**, *CSU San Marcos*  
Kinematics of the Loggerhead Shrike in relation to bite force and velocity

## Saturday, April 29, 2023

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### Session 23

#### Physical and Mathematical Sciences, Undergraduate

Location/Room: Theater, Room 270, 2nd Floor Conrade Prebys Aztec Student Union

- 8:30 am**     **Mina Thoresen**, *California State Polytechnic University, Pomona*  
Studying the Variability of IC 10 X2, a High-Mass X-ray Binary Containing a Possible Luminous Blue Variable and Neutron Star
- 8:50 am**     **Yik Haw Teoh**, *San José State University*  
Free Fermions Subject to Weak Quantum Measurement: Collapse Dynamics and Numerical Accuracy
- 9:10 am**     **Emma Modrick**, *Cal Poly Humboldt*  
Spectral Analysis of Tidal Currents in Humboldt Bay
- 9:30 am**     **Rachel Sedillos**, *Sacramento State*  
Investigations into the First Total Synthesis of Lorneic Acid F
- 9:50 am**     **Madeleine Goertz**, *California Polytechnic State University, San Luis Obispo*  
The Torus of Triangles
- 10:10 am**     **BREAK**
- 10:30 am**     **Sandra Torres**, *CSU East Bay*  
An IFS for the Stretched Level-n Sierpiński Gasket
- 10:50 am**     **Hannah Redhead**, *Sacramento State*  
Modelling Afterglow Light Curves of Neutron Star Merger Jets

- 11:10 am**     **Jordan Prather, Kyle Moll Lee**, *Stanislaus State University*  
First evidence of microplastics contamination in the Stanislaus and Tuolumne Rivers: a vital step towards environmental health risk assessment in the Stanislaus and San Joaquin Counties
- 11:30 am**     **Cindy Le**, *CSU Fullerton*  
Computationally Probing the Reaction Between Photobase and Lewis Acid

## Saturday, April 29, 2023

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### Session 24

#### Physical and Mathematical Sciences, Undergraduate

Location/Room: Visionary Suite, 3rd Floor, Conrad Prebys Aztec Student Union

- 9:00 am**     **Michael Pinkerton**, *CSU Dominguez Hills*  
A Case for Feasibility of Short-Lived Beams for Nuclear Physics Research
- 9:20 am**     **Raul Padilla Silvas**, *California State Polytechnic University, Pomona*  
Fabrication of a Carbon Paste Nanoelectrode
- 9:40 am**     **Claire Rogers**, *Cal Poly Humboldt*  
Numerical Modeling of an Active Leveling Scheme for Short-Range Tests of Gravity
- 10:00 am**     **Matthew Wagoner**, *CSU Chico*  
Two Different Magmas Forming the Bald Rock Pluton in Oroville, CA
- 10:20 am**     **BREAK**
- 10:40 am**     **Lily Harmon, Vanessa Reyes**, *Sonoma State University*  
Organic Synthesis of Carbazole Derivatives
- 11:00 am**     **Trevor Loe, Trevor Hidalgo, Mattie Toivola**, *California Polytechnic State University, San Luis Obispo*  
EIC Crab Cavity Low-Level RF Design
- 11:20 am**     **Autumn Galinski**, *San José State University*  
Ultra Diffuse Galaxies and Globular Clusters in the NGC 1407 Galaxy Group



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## About the CSU

The California State University System

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## The California State University System

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California State University is a leader in high quality, accessible, student-focused higher education. With 23 campuses, 474,600 students, and 49,000 faculty and staff, we are the largest, the most diverse, and one of the most affordable university systems in the country. We offer unlimited opportunities to help students achieve their goals. We prepare graduates who go on to make a difference in the workforce. We engage in research and creative activities leading to scientific, technical, artistic, and social advances. And, we play a vital role in the growth and development of California's communities and economy.

### California State University, Bakersfield (1965)

Centrally located on a 375-acre site in the southern San Joaquin Valley, California State University, Bakersfield is a continuously growing comprehensive regional university that is committed to transforming the lives of its students and community through its established excellence in academia, diversity, service, and community engagement since its founding in 1965. The faculty across the Western Association of Schools and Colleges (WASC) fully accredited University is world-class, with nearly 75% holding terminal degrees in their respective fields. A NCAA Division I school, CSUB has competed successfully in the Western Athletic Conference (WAC) since 2012 and is but one important aspect of a growing and vibrant student-life experience. The University serves more than 9,000 students at either the main campus in Bakersfield or CSUB Antelope Valley and counts over 40,000 alumni from its four schools: Arts and Humanities, Business and Public Administration, Natural Sciences, Mathematics and Engineering, and Social Sciences and Education. The University offers undergraduate, graduate, post-graduate, and credential programs, and CSUB's Extended University serves the community by offering additional professional development, certificate, and degree programs. With over 70 percent of its alumni remaining and working within the central valley, CSU Bakersfield supports ongoing social, cultural and economic development in the region.

9001 Stockdale Highway, Bakersfield, CA 93311-1099

Dr. Lynnette Zelezny, President

661) 654-2781 • <http://www.csub.edu>

This campus is on the semester system

### California State University, Channel Islands (2002)

Nestled in a picturesque setting five miles from the Pacific Ocean, Channel Islands is the newest CSU campus. Offering a student-centered education, CSU CI is known for its interdisciplinary, multicultural, service learning, and international emphases. Undergraduate, credential programs, and graduate programs create a close-knit atmosphere in which students receive individual attention from dedicated faculty. Opportunities for student research allow students to participate in faculty-mentored and independent research projects. Community-based research and community service opportunities allow students to develop their personal, professional, and leadership skills.

One University Drive, Camarillo, CA 93012

Dr. Richard Yao, President

(805)437-8400 • [www.csuci.edu](http://www.csuci.edu)

This campus is on the semester system

### California State University Chico (1887)

CSU, Chico, the second oldest campus in the CSU, is one of the highest-rated public universities in the West. With its comprehensive programs, dedicated faculty, and innovative methods, students have access to an exceptional public university experience. Located in a college-town setting, an impressive 90% of students live within one mile of the park-like campus. Renowned for its graduation and job placement rate, Chico State is dedicated to reaching out to its primary service area and beyond by offering innovative and well-respected programs such as in teacher education,

nursing, social work, communication science and disorders, public administration, and wildland management. Chico State students have also won numerous national awards for their accomplishments in history, business, engineering, construction management, journalism, political science, and speech. This pioneering institution made history as the first university in the world to offer a graduate degree via satellite and continues to be a trailblazer in distance education and in-person learning experiences.

400 West First Street, Chico, CA 95929  
 Dr. Gayle E. Hutchinson, President  
 (530) 898-4636 • [www.csuchico.edu](http://www.csuchico.edu)  
 This campus is on the semester system

### **California State University, Dominguez Hills (1960)**

More than half a century after its founding, California State University, Dominguez Hills serves as a conduit between the reality of today's America and a vision put forth by the CSU. In 1960, CSU Dominguez Hills was deliberately placed in Carson to serve as the intersection of promise and hope for a community in crisis. The university offers more than forty undergraduate majors, twenty master's degrees, and numerous certificate and credential programs. At CSU Dominguez Hills student success is our highest priority—we offer a strong selection of academic programs reflecting today's high-demand fields. We create opportunities in and out of the classroom for students, faculty and staff to work and learn together, promoting a student-centered atmosphere.

We are a university where pride and purpose meet; where upward mobility begins; where public policy is created; where diversity is celebrated and where our students gain knowledge and skills that prepare them to live and work in a multicultural, global world. As a public state university, we are continually committed to transforming the lives of our students.

1000 East Victoria Street, Carson, CA 90747-0005  
 Dr. Thomas A. Parham, President  
 (310) 243-3696 • [www.csudh.edu](http://www.csudh.edu)  
 This campus is on the semester system

### **California State University, East Bay (1957)**

Cal State East Bay serves the east side of San Francisco Bay with two scenic campuses, one in the Hayward Hills and the other in the Concord foothills, as well as a professional development center in downtown Oakland. With an enrollment of more than 14,000, the university attracts students from throughout the region and from more than 80 countries. Named a "Best in the West" college by The Princeton Review, Cal State East Bay offers more than 100 fields of study, award-winning curricula, small classes, expert faculty, and a fast, flexible quarter system. It confers bachelor's and master's degrees, as well as an Ed.D. in educational leadership.

25800 Carlos Bee Boulevard, Hayward, CA 94542  
 Dr. Cathy Sandeen, President  
 (510) 885-3000 • [www.csueastbay.edu](http://www.csueastbay.edu)  
 This campus is on the semester system

### **California State University, Fresno (1911)**

Fresno State is the premier university serving Central California's diverse, growing population. Faculty and students work with community partners on research focused on key regional challenges: water development and conservation, air quality, crop development and child-obesity prevention. The campus is home to the nation's first university commercial winery, the Downing Planetarium, the ultra-modern Henry Madden Library and the Smittcamp Family Honors College, which admits 50 top high school graduates each year with full scholarships. Fresno State's beautifully landscaped

academic campus (officially an arboretum since 1978) is near the Sierra Nevada Mountains, just two hours' drive from Yosemite, Kings Canyon and Sequoia national parks.

5241 North Maple Avenue, Fresno, CA 93740  
 Dr. Saul Jimenez-Sandoval, President  
 (559) 278-4240 • [www.fresnostate.edu](http://www.fresnostate.edu)  
 This campus is on the semester system

### **California State University, Fullerton (1957)**

CSU Fullerton offers the advantages of a dynamic, metropolitan university and a comfortable small-college atmosphere. Students flourish in mentoring relationships with outstanding professors who take pride in shaping a successful learning experience, including numerous opportunities for undergraduate research, hundreds of professional internships and prestigious competitions in the performing arts. With a vibrant, multicultural student population, CSUF ranks ninth in the nation in awarding baccalaureate degrees to minority students, and No. 1 in California and fifth in the nation in awarding baccalaureate degrees to Hispanics. The university is a top choice for future scientists, animation artists, educators, musicians, engineers, and also for studies in the humanities and behavioral and health sciences. Fifty-five undergraduate and 50 graduate degrees—including a doctorate degree—provide students the best of current practice, theory, and research and integrate professional studies with preparation in the arts and sciences.

800 N. State College Boulevard, Fullerton, CA 92834-9480  
 Mr. Framroze Virjee, President  
 (657) 278-2011 • [www.fullerton.edu](http://www.fullerton.edu)  
 This campus is on the semester system

### **California State Polytechnic University, Humboldt (1913)**

Cal Poly Humboldt is a comprehensive, residential campus located on California's pristine north coast. The campus is distinguished by its emphasis on real-world learning. Opportunities abound for undergraduate fieldwork in both the natural and social sciences. With annual enrollment just over 8,000, Humboldt State is large enough to offer a lively campus with major research facilities, but small enough that students are not lost in a crowd. It is a tight-knit community where professors and staff are known for getting to know their students. Humboldt State is home to one of the strongest natural resource and environmental studies departments in the nation and is consistently ranked by national publications as among the top regional colleges.

One Harpst Street, Arcata, CA 95521-8299  
 Dr. Tom Jackson, Jr., President  
 (707) 826-3011 • [www.humboldt.edu](http://www.humboldt.edu)  
 This campus is on the semester system

### **California State University, Long Beach (1949)**

California State University, Long Beach (CSULB) is a diverse, student-centered, globally engaged university that provides highly valued degrees through superior teaching, research, scholarly and creative activity, and a commitment to service. With more than 37,500 students, it is one of the largest campuses among the CSU system's 23 campuses and one of the largest in the state of California. Students can choose from 82 baccalaureate degrees, 16 credentials, 65 master's degrees, and four doctoral degrees in engineering, physical therapy, nursing and educational leadership. CSULB has been consistently ranked:

- Among the top five best public universities in the West by U.S. News and World Report in recognition of its high-quality education at an affordable price.
- A 'Best College Value' (Kiplinger's Personal Finance).



- Sixth in the nation in conferring bachelor's degrees to minority students (Diverse Issues in Higher Education).
- One of the top universities nationally in freshmen applications.

1250 Bellflower Boulevard, Long Beach, CA 90840

Dr. Jane Close Conoley, President

(562) 985-4111 • [www.csulb.edu](http://www.csulb.edu)

This campus is on the semester system

### **California State University, Los Angeles (1947)**

California State University, Los Angeles is the premier public comprehensive university in the heart of Los Angeles. The University is part of the 23-campus California State University system, which is the largest public university system in the nation. Cal State LA promotes academic excellence, achievement, leadership and well-being to more than 28,600 students. The student population reflects the rich diversity of the Los Angeles region. The majority of students — 23,440 — are undergraduates who are taking courses in more than 60 majors, often in small classes where professors know them by name. The University has eight colleges that are recognized for outstanding programs and professors who are accomplished mentors and researchers. Cal State LA strives to provide a small-campus feel at a public university in a global city.

5151 State University Drive, Los Angeles, CA 90032

William A. Covino, President

(323) 343-3000 • [www.calstatela.edu](http://www.calstatela.edu)

This campus is on the semester system

### **California State University Maritime Academy (1929)**

The California Maritime Academy, which joined the CSU in 1995, is one of only seven degreegranting maritime academies in the U.S. and the only one on the West Coast. Its graduated cadets include the first woman to captain a commercial vessel. Cal Maritime graduates enjoy a very high job placement rate, thanks to a unique experiential learning curriculum that includes at least one international training cruise. Located in Vallejo on the shore of San Pablo Bay, Cal Maritime offers accredited degrees in business administration, marine transportation, facilities engineering technology, maritime policy and management, marine transportation, facilities engineering technology, maritime policy and management, marine engineering technology, and mechanical engineering. A program of intellectual learning, applied technology, global awareness, and leadership development prepares graduates for positions of responsibility in the areas of maritime, business, logistics, intermodal transportation, and engineering.

200 Maritime Academy Drive, Vallejo, CA 94590

Dr. Thomas A. Cropper, President

(707) 654-1000 • [www.csum.edu](http://www.csum.edu)

This campus is on the semester system

### **California State University, Monterey Bay (1994)**

CSU Monterey Bay provides more than 7,000 students with an extraordinary opportunity to learn at a residential campus on the beautiful Monterey Peninsula. The diverse student body receives personal attention in small classes while pursuing degrees in 25 undergraduate and nine graduate majors. About half of the university's students are among the first generation of their families to attend college, and about three-fourths receive financial aid. Founded in 1994 on the former site of Fort Ord Army base by educators and community leaders, CSUMB faculty and staff find innovative ways to meet the needs of students while simultaneously powering the Monterey Bay region's economy.

100 Campus Center, Seaside, CA 93955-8001

Dr. Vanya Quiñones, President

(831) 582-3330 • [www.csumb.edu](http://www.csumb.edu)

This campus is on the semester system

### California State University, Northridge (1958)

One of the largest universities in the country, California State University, Northridge (CSUN) is an urban, comprehensive university that delivers award-winning undergraduate and graduate programs to nearly 40,000 students annually and counts more than 330,000 alumni who elevate Southern California and beyond. Since its founding in 1958, CSUN has made a significant and long-term economic impact on California, generating nearly \$1.9 billion in economic impact and more than 11,700 jobs each year. The LAEDC recognized CSUN as its 2015 Eddy Award winner for its positive economic impact. Serving more students on Pell Grants than any other institution in California, CSUN is also a social elevator and one of the most diverse universities in the country. CSUN ranks 13th in awarding bachelor's degrees to underrepresented minority students and seventh in bachelor's degrees to Latino students, serves the 13th largest Jewish student population, and enrolls the largest number of deaf and hard-of-hearing students of any U.S. state university. The journal *Nature* recently named CSUN a Rising Star for scientific research, and the NSF ranks CSUN in the top five nationally among similar institutions for graduates who go on to earn doctorates in the sciences. CSUN is where individuals rise. And through them, so does Greater Los Angeles and beyond.

1811 Nordhoff St., Northridge, CA 91330

Dr. Erika D. Beck, President

(818) 677-1200 • [www.csun.edu](http://www.csun.edu)

This campus is on the semester system

### California State Polytechnic University, Pomona (1938)

Cal Poly Pomona is among the best public universities in the West and is nationally ranked for helping students achieve economic success. As an inclusive polytechnic university, we cultivate success through experiential learning, discovery and innovation. Our graduates are ready to succeed in the professional world on Day 1. Faculty in all disciplines put theory to practice, providing students with opportunities to apply their knowledge in hands-on projects, research collaborations, and valuable internship and service-learning programs. Our history and geography are unlike any other university in the region. Nowhere else can students ride an Arabian horse, practice on a Steinway piano, bring a new product to market, and build a liquid-fueled rocket. Cal Poly Pomona programs have earned the campus a national reputation and high rankings on lists of best universities in U.S. News & World Report and other publications. The decorated and committed faculty along with our dedicated staff have helped the university achieve these lofty academic accomplishments.

3801 W. Temple Avenue, Pomona, CA 91768

Dr. Soraya M. Coley, President

(909) 869-7659 • [www.cpp.edu](http://www.cpp.edu)

This campus is on the semester system

### California State University, Sacramento (1947)

Sacramento State is California's capital university and a recognized leader in education, innovation, and engagement, dedicated to transforming lives by preparing students for leadership, service, and success. Located in a 3,500-tree urban forest just six miles from the State Capitol, our diverse student body of 30,000 enjoys unique opportunities to live, work, and learn in the political, cultural, and economic heart of California. Founded in 1947, the University has grown to offer 58 undergraduate majors, 41 master's degrees, 20 credential programs, two independent doctorates, and a joint doctorate. Our passionate students, dedicated faculty, and more than 235,000 alumni shape the landscape of California, providing valuable insight and community leadership in one of the nation's fastest-growing and most innovative regions.

6000 J Street, Sacramento, CA 95819

Dr. Robert S. Nelsen, President

(916) 278-6011 • [www.csus.edu](http://www.csus.edu)

This campus is on a semester system

### California State University, San Bernardino (1960)

Cal State San Bernardino, at the foot of the San Bernardino Mountains, was named by students as the most beautiful campus in the CSU system. Serving the Inland Empire region, its nationally accredited College of Business and Public Administration offers an M.B.A. tailored for executives. In addition, the university has a nationally acclaimed writing program and highly respected offerings in computer science, geographic information and decision sciences, psychology, public health administration, and accounting and finance. The university has a leading state-accredited teacher preparation program that is one of the nation's largest. Courses are also offered at off-campus locations, including a permanent satellite campus in Palm Desert.

5500 University Parkway, San Bernardino, CA 92407-2397

Dr. Tomás D. Morales, President

(909) 537-5000 • [www.csusb.edu](http://www.csusb.edu)

This campus is on the quarter system

### San Diego State University (1897)

San Diego State University is the oldest and largest higher education institution in the San Diego region. Since it was founded in 1897, the university has grown to offer bachelor's degrees in 85 areas, master's degrees in 76, and doctorates in 21 disciplines. SDSU's 31,000 students participate in an academic curriculum distinguished by direct contact with faculty and an increasing international emphasis that prepares them for a global future. SDSU is designated by the Carnegie Foundation as a research university with high research activity and is ranked among the top 150 public universities in research support, with \$145 million in 2010-11.

5500 Campanile, San Diego, CA 92182

Dr. Adela de la Torre, President

(619) 594-5200 • [www.sdsu.edu](http://www.sdsu.edu)

The campus is on the semester system

### San Francisco State University (1899)

San Francisco State University, located in one of the world's most vibrant and beautiful cities, is a recognized leader in addressing issues both global and regional. With a diverse range of students from almost every state and nearly 100 countries, the University community is a perfect setting for learning to succeed in a pluralistic society and global community. The programs of study at SF State also address regional needs for advanced-placed professionals in the fields such as business, cinema, science, health sciences, social services and education. In addition to 115 undergraduate programs, 63 master's degree programs, and 11 credential programs, SF State offers two joint doctoral programs with the University of California and an independent Ed.D., in Educational Leadership. SF State's pioneering commitment to community and civic engagement is prevalent throughout the curriculum. The University has been named by Princeton Review as one of 81 "Colleges with a Conscience," and is classified as one of the Carnegie Foundation's "Community Engagement" institutions.

1600 Holloway Avenue, San Francisco, CA 94132

Dr. Lynn Mahoney, President

(415) 338-1111 • [www.sfsu.edu](http://www.sfsu.edu)

This campus is on the semester system

## San José State University (1857)

San José State University (SJSU), a metropolitan university, has a long and proud history as a supplier of excellent higher education, a contributor to the skilled workforce in the Bay Area, and an incubator for innovations that have local and global impacts. Through the decades, the key mission of the university has remained the same – to offer an exceptional and affordable education to all students so they find success in their careers and become engaged citizens of California. SJSU is committed to providing rigorous course work, along with research, scholarship, and creative activity (RSCA) opportunities, to a diverse population of over 36,000 undergraduate and graduate students in seven colleges. The university is especially dedicated to enhancing the connection between RSCA and classroom activities to provide context and relevance for the curriculum while also engaging and inspiring students. These opportunities combine learning with discovery, mentoring with teaching and knowledge with application.

SJSU also recognizes the importance of RSCA to move disciplines forward, improve quality of life on local and global levels, provide experiences for students that support retention, build the reputation of our institution and bring in resources from outside agencies. SJSU is situated in a region known for innovation with extensive global connections that leads the United States and the world in many industries. The university is proud to be a partner with Silicon Valley through engagement and intellectual contributions with industry leaders, government agencies and nonprofits.

One Washington Square, San José, CA 95192-0001

Dr. Cynthia Teniente-Matson, President

(408) 924-1000 • [www.sjsu.edu](http://www.sjsu.edu)

This campus is on the semester system

## California Polytechnic State University, San Luis Obispo (1901)

Educating both the head and the hand has been at the heart of Cal Poly, San Luis Obispo, since 1901. Today, Cal Poly is the world's leader in Learn by Doing education – making our students better prepared from day one to make a lasting impact in their careers and their communities. Cal Poly is recognized by peer institutions and by the U.S. News and World Report as one of the nation's finest public primarily undergraduate institutions. The university is particularly well known for its outstanding programs in engineering, architecture, and agriculture. With over 6,000 acres, the campus is one of the largest in the nation and accommodates a working vineyard amongst other agricultural operations. Cal Poly's *Learn by Doing* philosophy permeates teaching, learning, and living as a campus community and produces a high return on investment for students and California. Cal Poly is among six California State University campus partners to share global recognition for CSU efforts to reshape how the system teaches its nearly half a million students about climate change. Across the world, Cal Poly alumni are making a difference, giving back and having an impact on their communities. Over 100,000 alumni and students have benefited from the Cal Poly advantage and have contributed to the state's and the nation's intellectual and economic engines. Among its prominent alumni are NASA astronauts Robert "Hoot" Gibson and Victor Glover. Cal Poly recently launched a new Latinx Alumni Community to connect students and alumni as part of its HSI initiative.

One Grand Avenue, San Luis Obispo, CA 93407

Dr. Jeffrey D. Armstrong, President

(805) 756-1111 • [www.calpoly.edu](http://www.calpoly.edu)

This campus is on the quarter system

### California State University, San Marcos (1989)

California State University San Marcos is a national leader of social mobility, transforming lives, families and communities. As the first-choice university for first-generation students and future generations, the university drives intellectual engagement, innovation and sustainability for a diverse, global society. Our exemplary academic programs respond to societal needs and prepare students to be tomorrow's socially just leaders and change makers. Through first-year programs, learning communities, internships, undergraduate research and much more, the university works to foster deep learning and academic success by engaging students in meaningful and innovative educational experiences. Located on a 306-acre hillside overlooking the city of San Marcos, CSUSM is the only public four-year comprehensive university serving North San Diego, Southwest Riverside and South Orange counties.

333 S. Twin Oaks Valley Road, San Marcos, CA 92096-0001

Dr. Ellen J. Neufeldt, President

(760) 750-4000 • [www.csusm.edu](http://www.csusm.edu)

This campus is on the semester system

### Sonoma State University (1960)

Sonoma State University, founded as a teacher education center for the North Bay, is now a liberal arts and sciences university that provides high-quality undergraduate education and selected professional graduate programs. Dedicated to the liberal arts and sciences and known for its active use of technology, the Sonoma State educational experience fosters intellectual, cognitive, social, and personal growth. The university's faculty and staff provide close mentoring relationships and an education that fosters ethical exploration, civic engagement, social responsibility, and global awareness combined with a solid foundation in an academic discipline.

1801 East Cotati Avenue, Rohnert Park, CA 94928-3609

Dr. Ming-Tung Lee, Interim President

(707) 664-2880 • [www.sonoma.edu](http://www.sonoma.edu)

This campus is on the semester system

### Stanislaus State University (1960)

As the only public four-year university in the Northern San Joaquin Valley, Stanislaus State University serves a diverse student body of more than 9,200 on a beautiful 228-acre campus that is the region's largest urban forest. Along with its Stockton campus, it has top programs in four colleges offering 42 undergraduate major programs, 23 master's programs, a doctoral program, seven credential programs, and eight certificate programs as well as an acclaimed executive MBA program. It is a federally-designated Hispanic-Serving Institution (HSI) that helps meet the workforce needs of the region with partnership programs in nursing, teacher education, business, and agriculture. The University is one of only two CSUs to offer cognitive studies and the forensic science concentration within the bachelor's degree in criminal justice. Stanislaus State was ranked the No. 1 public university in the nation for helping its students exceed expectations by Money. The University is designated with the Carnegie Foundation's Community Engagement Classification and has been named to the national President's Higher Education Community Service Honor Roll each year since its 2006 inception.

One University Circle, Turlock, CA 95382-0299

Dr. Ellen N. Junn, President

(209) 667-3122 • [www.csustan.edu](http://www.csustan.edu)

This campus is on the semester system



The best research, creativity and scholarship from across the CSU

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## Acknowledgements

Our thanks and appreciation to the following individuals, units, and groups for their support of student involvement in research, scholarship, and creative activities

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A huge thank you to all the CSU students, faculty, staff, and administrators who have dedicated their time and energy in support research, scholarship, and creative activities (RSCA) in service to changing lives across our state, nation, and world.

Special thanks to the CSU Chancellor's office for sponsoring this fantastic annual event, Tammy Nguyen of TN Events Management, Dr. Terri Patchen (CSU Fullerton), and to all the session moderators and judges who volunteered their time in support of CSU student research.

Our thanks and appreciation to the following individuals, units, and groups at SDSU for their support of student involvement in RSCA.

### Administration

Adela de la Torre, President

Hector Ochoa, Provost and Senior Vice President

Hala Mandanat, Vice President of Research and Innovation

Mark B. Reed, Associate Vice President for Research Operations

### Academic Deans

Heather Canary, Interim Dean, College of Professional Studies and Fine Arts

Y. Barry Chung, Dean, College of Education

Halil Güven, Dean, SDSU Georgia

Steve Hooker, Dean, College of Health and Human Services

Tracy Love, Dean, College of Graduate Studies

Karen S. Myers-Bowman, Interim Dean, SDSU Global Campus

Dan Moshavi, Dean, Fowler College of Business

Gina Núñez-Mchiri, Dean, Imperial Valley Campus

Eugene A. Olevsky, Dean, Engineering

Jeffrey Roberts, Dean, College of Sciences

Ronnee Schreiber, Interim Dean, College of Arts and Letters

Scott Walter, Dean, University Library

### 37th Annual CSU Student Research Competition Student Artist

Thi Kieu Trang Dang

### SDSU CSU Student Research Committee

Kate Hatcher

Alicia Kinoshita

Marta Miletic

Chelsea Malicdem

Alex Munoz

EJ Sobo

### Space, Logistics and Publicity Assistance

Liza Bennett, Associated Students

Monika Lemp, Instructional Technology Services

Sophia McKernan-Mellow, Research and Innovation

Sarah White, Research and Innovation

A special thanks to the rest of the Division of Research and Innovation in helping make this event possible.



The best research, creativity and scholarship from across the CSU

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## Maps

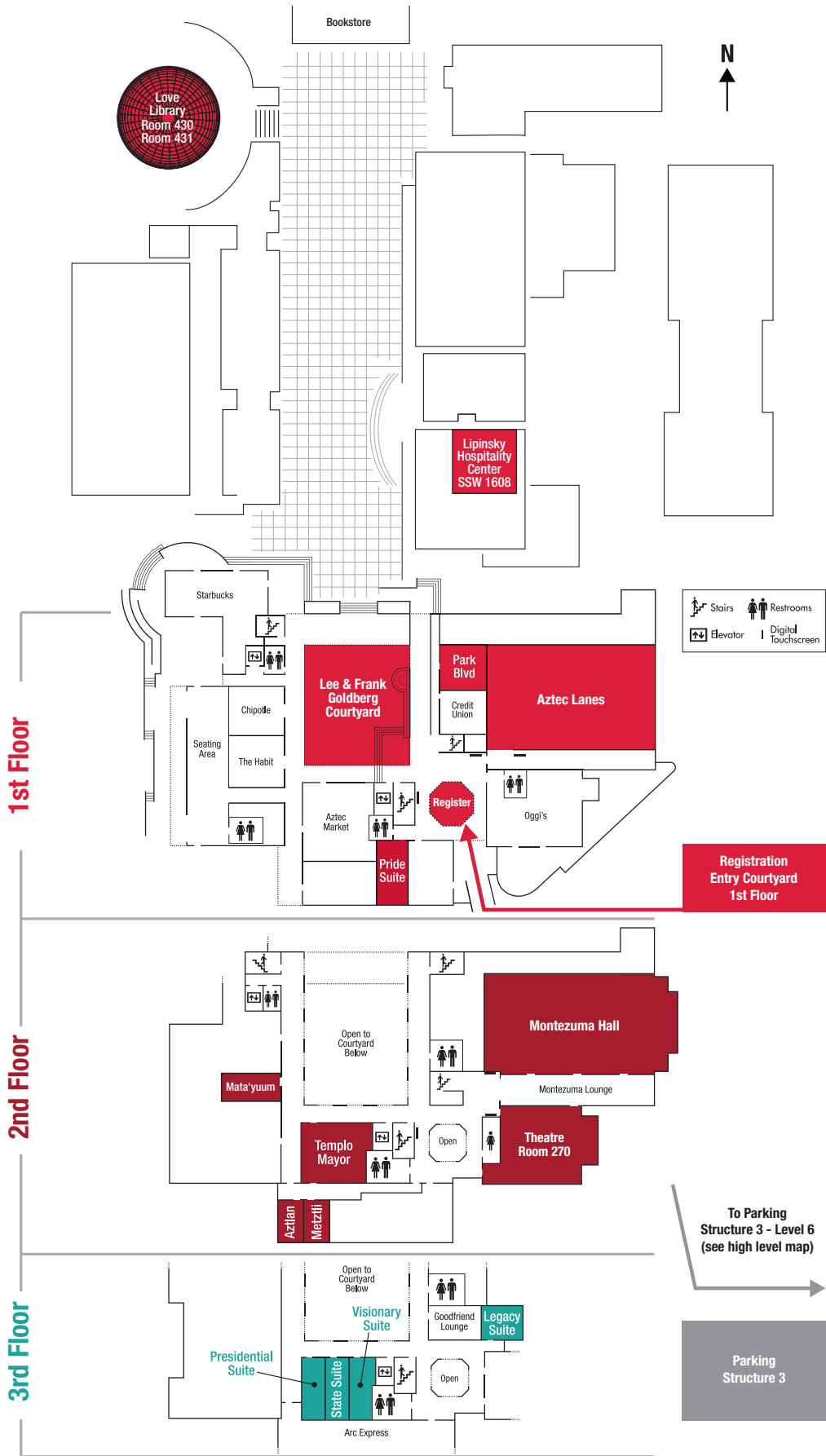
Wayfinding to events and parking

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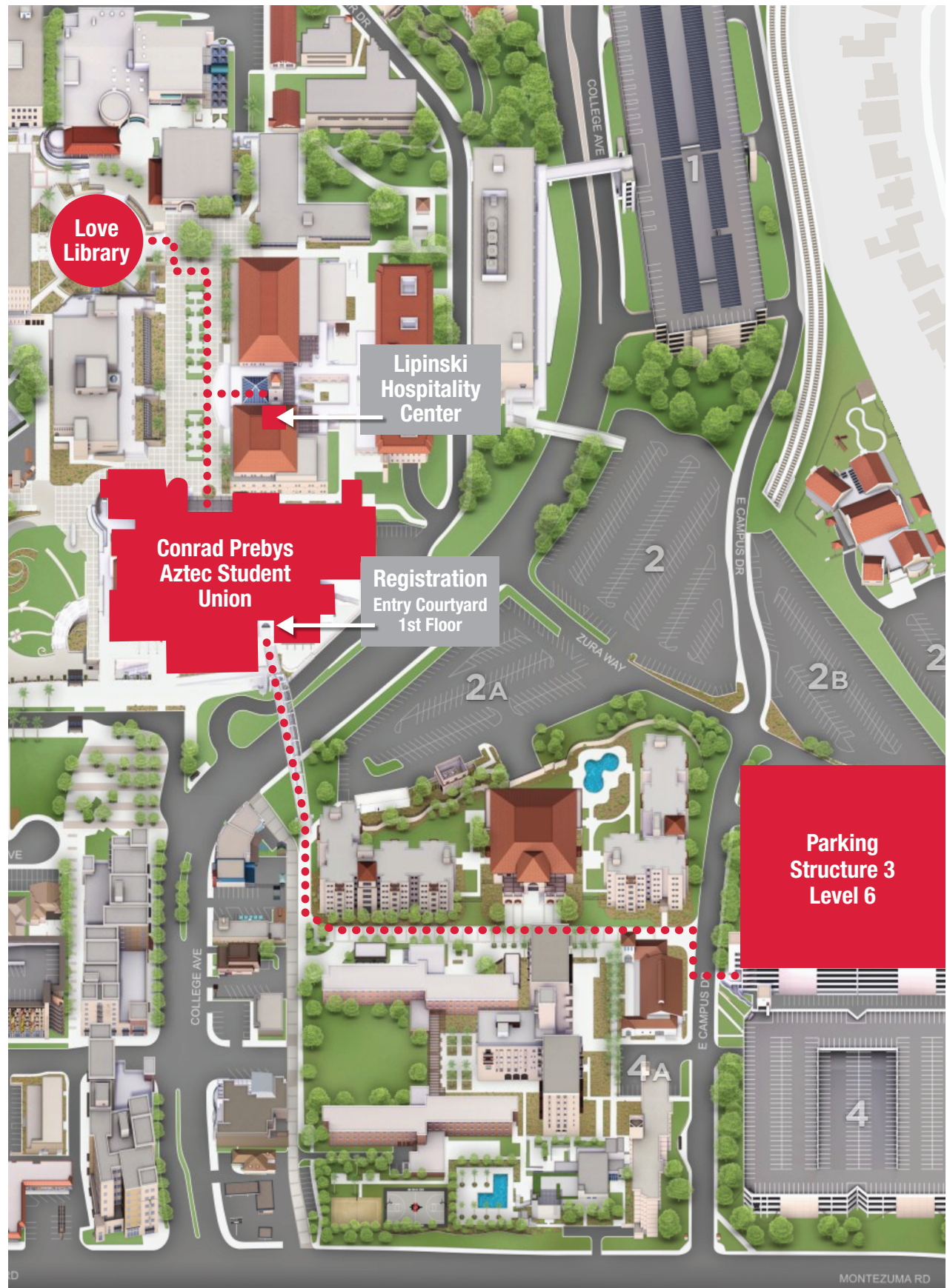


Centennial Plaza and Walkway

Conrad Prebys Aztec Student Union



DETAILED EVENT LOCATION MAP



HIGH LEVEL MAP OF SDSU CAMPUS



Conrad Prebys Aztec Student Union  
April 28-29, 2023