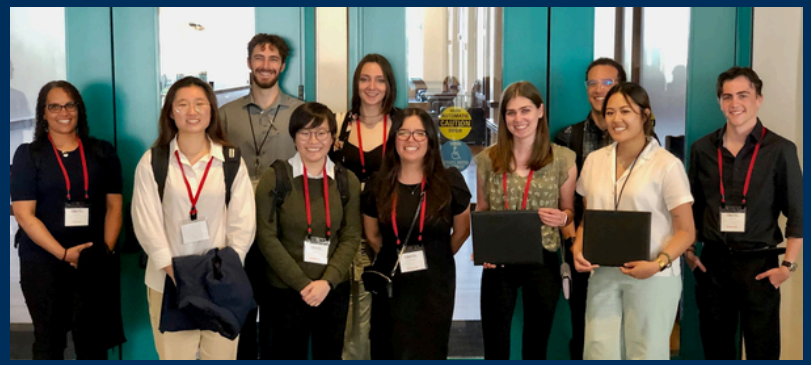
Symposium on Student Research, Creative Activities, and Innovation









Friday, February 28th, 2025

Acknowledgments

We would like to acknowledge and thank all the participants, judges, faculty sponsors, community members, and room moderators for their participation. Below is a listing of all academic programs that participated today:

- Applied Physics
- Biochemistry
- Biological Science
- Chemistry
- Computer Science
- Economics
- Environmental Studies
- History
- Human Development
- Kinesiology
- Literature & Writing
- Public Health
- Psychology Sciences
- Sociology
- Speech Language Pathology

2024 Statewide CSU Student Research Winner



Congratulations to our 2024 winner:

Jessica Orea

(1st Place)



Thank you to OGSR and CUGR for hosting this event.

Event Schedule



2:00 - 3:15 PM	**Oral Presenations**
3:15 PM	**Reception in MARK Lobby**
4:00 PM	**Awards Ceremony in MARK 125**

California State University SAN MARCOS

OFFICE OF GRADUATE STUDIES AND RESEARCH

Session 1: MARK 101

2:00-2:15 PM

- Brent Reed - *Biomechanical and Motor Control Analysis of Mixed Martial Arts Movements*

2:15-2:30 PM

- Christine Frazier - *Validating the Psychedelic Experience: Depictions of Native Americans, Science, and the East in U.S. Media*

2:30-2:45 PM

- Emily Holman - *The Monsters of Mourning: A Study of Grief through Cryptozoology*

2:45-3:00 PM

- Taen Bounthapanya - *(Re)Connecting Through the Art of Translation: Remembering the Words of Elders and Ancestors in translating Sieosavat from Lao to English*

3:00-3:15 PM

- Juan Leyva - *Effects of Booties on Foot Skin Temperature During Surfing*

Session 2: MARK 102

2:00-2:15 PM

- Alyson Portillo - *Association Between Educator Burnout and Evidence-Based Intervention Implementation Fidelity*

2:15-2:30 PM

- Alyssa Nieves - *Supporting Formerly Incarcerated Students and Assessing the Role Trauma has in their Educational Journey*

2:30-2:45 PM

- Raquel Yoshinaga - *Students of Color Leverage their Social Capital to Navigate STEM Classrooms*

2:45-3:00 PM

- Troy Tekonopoulos - *Understanding Risk Perceptions in a Changing Tobacco Marketplace*

Session 3: MARK 104

2:00-2:15 PM

- Josue Vides - *Impact of age on NACHO in the amygdala*

2:15-2:30 PM (N/A)

2:30-2:45 PM

- Milly Lopez - *Anxiety, Cannabis Use, and E-Cigarette Use among Young Adults who Identify as LGBTQIA+*

2:45-3:00 PM

- Nathan Lenski - *Behind the Numbers: Examining Disparities in Homelessness in San Luis Obispo County*

3:00-3:15 PM

- Karina Marquez - *Knockdown of NACHO in the hippocampus causes deficits in recognition memory and reduces anxiety-like behaviors in mice.*

Session 4: MARK 106

2:00-2:15 PM

- Mikaela Speets-Drake - *Exploring Microbial Communities and Their Spatiotemporal Patterns Across Mission Bay*

2:15-2:30 PM

- Camila Valderrama-Martínez - *Comparing the Mobilome of Nearshore Microbial Communities between Exogenous Plastic Marine Substrates and Water Column*

2:30-2:45 PM

- Veronica Useche - *Does HCN2 regulate the excretory function of MTs in economically important insects?*

2:45-3:00 PM

- Nathaniel Kenner - *Characterization of the Ranavirus ambystoma1 5L Viral Protein*

3:00-3:15 PM

- Nashea Lampkins - *The upregulation of genes in gamma delta T cells and their correlation to alopecia areata in humans*

Session 5: MARK 201

2:00-2:15 PM

- Maya Qaddourah - *Bioinformatics Analysis Suggests That SE_1780 protein from Staphylococcus epidermis may be a member of the Fph Family of Lipases*

2:15-2:30 PM

- Kaden Winspear - *Eastern Pacific fin whales through the lens of conservation genomics*

2:30-2:45 PM

- Fermin Corona - *Characterizing a two-level fluctuator through the Allan Variance*

2:45-3:00 PM

- Arianna Serrano - *Substrate Scope Preparation for Gold-Catalyzed Friedel–Crafts- like Alkylation Reactions*

Session 6: MARK 203

2:00-2:15 PM

- Erica Rodas Montejo - *Synthesizing RGD-alginate Hydrogel to Support Stem Cell Differentiation into Adipocyte*

2:15-2:30 PM

- Josue Navarrete - *Taxonomic and Functional Analysis of Microbial Communities on a Gradient of Urbanization*

2:30-2:45 PM

- Symphony Rutkowski - *Investigating the Role of Rad51 Strand Invasion Function of CCTG Breakage*

2:45-3:00 PM

- Matthew Leslie - *Characterization of the Ambystoma tigirnum virus 89R Gene*

3:00-3:15 PM

- Krissa Casao & Riley Millan - *Citizen Science Survey Methods to Support of Bat Conservation in a Coastal San Diego County Salt Marsh Lagoon*

Session 7: MARK 208

2:00-2:15 PM

- Marisa Mendoza - *Taxonomic and Functional Profiles of Nearshore Microbial Communities associated with Water and Plastic Marine Substrates*

2:15-2:30 PM

- Hannah Smith - *The Immune-Stimulating effects of Oyster Mushrooms on Children's Python leukocytes against bacteria in vitro*

2:30-2:45 PM

- Imaan Sahid - *Characterizing temporal changes in the marine environment off Oceanside, California*

2:45-3:00 PM

- Callie Steppat - *The Role of Voltage-Gated Ion Channels KCNH1 and KCNH8 in Regulating Ion Transport in the Malpighian Tubules of Cabbage Looper Larvae*

3:00-3:15 PM

- Emily Pham - *To pee or not to pee: The regulation of HCN channels of ion transport in the Yellow Fever mosquito Aedes aegypti osmoregulatory organ MTs as a way to produce urine*

Session 8: MARK 205

2:00-2:15 PM

- Abigail Lopez - *An Examination of Oral Persuasive Narratives from Middle School to College*

2:15-2:30 PM

- Keneth Munoz - *Hematopoietic Stem Cell & Gene Therapy for Friedreich's Ataxia*

2:30-2:45 PM

- Alexander MacDonald & Alexander Anderson - *No sex differences in fat oxidation in response to exercise prescribed according to maximal heart rate or ventilatory threshold.*

2:45-3:00 PM

- Kaitlyn Sung - *Semaglutide acutely decreases intake of sucrose-rich food & blunts body weight cycling in a rat model of binge-eating*

Session 9: MARK 209

2:00-2:15 PM

- Justin Gans - *History and The Zone of Interest: The Changing Landscape of Holocaust Film*

2:15-2:30 PM

- Bianca Delia - *Role of Neuromodulators in Aging and Addiction in the Mesolimbic Reward Pathway*

2:30-2:45 PM

- Zoey Morrissette - *What is the Impact of Air Pollution on the Number of Crimes?*

2:45-3:00 PM

- Gustavo Benitez - *Disparities and impact of flavor restrictions on tobacco products in online vaping retailers*

CSU Student Research Competition

Each spring California State University hosts the system-wide CSU Student Research Competition at one of its 23 campuses. The purpose of the event is to promote excellence in undergraduate and graduate scholarly research and creative activity by recognizing outstanding student accomplishments. Each campus holds its own competition to select up to 10 student research presentations to send to the statewide competition. Finalists in the campus competition receive cash awards and travel resources to compete at the statewide competition in late April. This year's Symposium will be hosted by Cal Poly University Humbolt on April 25th and April 25th, 2025. Finalists in the CSU-wide Student Research Competition receive certificates of recognition and cash awards.