

# 2025 Central California Research Symposium Event Schedule

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## ORAL PRESENTATIONS

## **Session A: Room 105**

**09:00 AM:** Alexandra Clifton - ***“A SOCIAL COGNITIVE PERSPECTIVE ON PROFESSIONAL DEVELOPMENT: PERSONAL AND ENVIRONMENTAL FACTORS SHAPING LEADERS’ ADAPTIVE PERFORMANCE AND ORGANIZATIONAL COMMITMENT IN HEALTHCARE”***

**09:15 AM:** Rebecca Saechao - ***“Navigating the Intersections: A Narrative Inquiry into Educational Journeys of Southeast Asian Americans with Disabilities”***

**09:45 AM:** Manlia Xiong - ***““What does it mean to belong?”: The undergraduate Hmong American experience at Central Valley University”***

## Session B: Room 206

**08:45 AM:** Ethan Fierro - “*What Makes A Machiavellian: The Negative Connotations of Political Realism*”

**09:00 AM:** Noah Reed Miranda - “*Playing with Orientalism in How to Host a Murder's Hoo Hung Wu*”

**09:15 AM:** Xóchitl Solis - “*Mass Shootings: Prevalence of Mental Disorders and Case Management Services*”

## Session C: Room 207

**08:45 AM:** Andy Cabrera - ***“Discovering evolutionary relationships in the economically important plant genus Amaranthus”***

*Additional Authors: Josué Magaña, Danya Sumrein, Luis Hernandez, Pankti Chavda, Katherine Waselkov*

**09:00 AM:** Ana Ramirez Perez - ***“Exploring the Role of L-Plastin in the Formation of Tunneling Nanotubes”***

*Additional Authors: Dr. Karine Gousset*

**09:30 AM:** Emmanuel Okposio - ***“Urbanization and Mountain ranges: Populations Genetics of an Immune Gene in House Finches”***

*Additional Authors: Kevin McGraw, Joel Slade*

**09:45 AM:** Taylor-J Sanchez - ***“Evaluating Hydra vulgaris metabolism due to temperature stress and microbiome elimination”***

*Additional Authors: Juris Grasis, PhD*

## Session D: Room 214

**08:45 AM:** Brianna Salkow-Rose - ***“Designing a Computational Activity to Enhance Student Understanding of Glycolysis ”***

**09:00 AM:** Shaur Herng Chong - ***“Improving Anticancer Potency of Indazole Biaryl Compounds”***

*Additional Authors: Dennis Ashong, Esveidy Oceguera, Paulina Vergara, Johnathan Diaz, Eakmjyot Bual, David Nguyen, Melina Renteria, Mekai Barrientez, and Qiao-Hong Chen.*

**09:15 AM:** Ian Heu - ***“Experimental Analysis of Unexpected Quaternary Structure Formation in Decoration (Dec) Protein Mutants to Confirm Key Amino Acid Predictions from Computational Modeling”***

**09:30 AM:** Yogeshwari Oka - ***“Investigating mAb AR9.6 Mechanism of Action: Inhibition of MUC16 Protein-Protein Interactions”***

**09:45 AM:** Stan Gomez - ***“Dimerization of Substituted 1,6-Dihydropyridines for the Eventual Synthesis of Tetracyclic Bis-Piperidine Alkaloids”***

*Additional Authors: Abbas Dadawalla, Dennis Ashong, Guanglin Chen, Qiao-Hong Chen*

## Session E: Room 215

**09:00 AM:** Parshwa Khane - *“Development of an Electrodialysis-based Water Treatment System for Selective Removal and Recovery of Phototoxic Contaminants”*

**09:15 AM:** Brian Kurzeja - *“MatchupMind: Predictive Sports Analytics through Deep Learning”*

**09:30 AM:** Joseph Igot - *“A Software-Defined GPS Receiver with Integrated Spoofing Detection and Mitigation”*

## Session F: Room 216

**08:45 AM:** Kiran Prasannan Nair - ***“C-VEP Virtual Speller – A High-ITR Brain-Computer Interface Tool”***

**09:00 AM:** Matthew Briggs - ***“X-ray Attenuation Measurements of a Fibrous Breast Tissue Phantom and X-ray Contrast Measurements with Various Plastics”***

**09:15 AM:** Philip Sarkisian - ***“Electrodynamics in an Expanding Universe”***

*Additional Authors: Gerardo Muñoz*

**09:30 AM:** Patrick Hinrichs - ***“Classifying Di-Higgs Production Modes with Deep Learning”***

**09:45 AM:** Joseph White - ***“Detecting Periodic Behavior in Astrophysical Phenomena”***

*Additional Authors: Joseph White, Dr. Ettore Vitali, Dr. Frederick Ringwald*

## **Session G: Room 105**

**10:15 AM:** Lawrence Rede - ***“Arm Controlled Manipulator”***

*Additional Authors: Lawrence Rede, Rigoberto Leal*

**10:30 AM:** Saiprudhvi Donthula - ***“Understand Artificial Intelligence (AI) and its Applications across Capital Project’s Lifecycles”***

**10:45 AM:** Ashutosh Goswami - ***“Pollutus Imperium Tree (PIT)”***

**11:00 AM:** Anurag Wani - ***“Enhancing Social Sustainability in Small Construction Companies in California: Overcoming Awareness Gaps, Cultural Resistance and Community Engagement.”***



## Session H: Room 206

**10:15 AM:** Mackenzie Jackson - ***“Exploring Radical Formation, Fragmentation, and Polymerization in Low Temperature Plasma with Pentane and Acrylic Acid as Precursors”***

*Additional Authors: Kristina D. Closser Ph.D, Morgan J. Hawker Ph.D*

**10:30 AM:** Maria Duke-Mendoza - ***“Computational Studies of Carbamazepine Stability in Aqueous Solutions ”***

**10:45 AM:** Paola Aguilera - ***“Chickpea (Cicer arietinum L.) seed surface modifications using low-pressure air plasma to enhance germination”***

*Additional Authors: Emily Rocha*

**11:00 AM:** Luis Ceron - ***“Evaluating phenylurea herbicide photostability using computational chemistry”***

**11:15 AM:** Christian Dwyer - ***“Electronic Structure and Photodetachment of Gadolinium Oxides”***

*Additional Authors: Andrew Bovill, Caleb Huizenga, Shivangi Vaish, Hrant Hrachian, Caroline Chick Jarrold*

## Session I: Room 207

**10:15 AM:** Sofie Krivobok - ***“Friends or Foes? Investigating the Relationship of Rhizopogon vinicolor and its Potential Parasites”***

*Additional Authors: Alija Bajro Mujic Ph.D., Taylor Coleman, Ana Chavez*

**10:30 AM:** Danica Belman - ***“Prey size selectivity in aquatic carnivorous plants: Expanding predator-prey models to plant predation”***

*Additional Authors: Otto Berg, PhD., Ulrike Müller, PhD.*

**10:45 AM:** Naomi Garcia - ***“Temperature-mediated Effects of Gal-4 Enteric Neuron Stimulation on Parkinson's Disease Development in Drosophila melanogaster”***

**11:00 AM:** Lauren Bernardi - ***“A Comparison of the Lateral Pallium as a Representation of Environment Complexity in Pomacentridae and Poecilia”***

**11:15 AM:** LeAnne Gip - ***“Immunogenetics and Bloodborne Parasites in Overwintering White-Crowned Sparrows”***

*Additional Authors: Daniel Santos-Mendoza, Alejandra Valenzuela, Joel Slade*

**11:30 AM:** Zoie Gavel - ***“Chalcone 30 Impacts Nutrient Absorption and Development of Caenorhabditis Elegans”***

*Additional Authors: Alejandro Calderón-Urrea*

## Session J: Room 214

**10:15 AM:** Victoria Wiest - *“An extension of the  $sl(n)$  polynomial to knotted 4-valent graphs”*

*Additional Authors: Victoria Wiest*

**10:30 AM:** Itzel Michel-Carrillo - *“The Impact Cohort Experiences Have on Students' Sense of Belonging, Academic Performance, and Career Readiness”*

**10:45 AM:** Grace Burton - *“The Tied Braid Monoid, Tied Flat Diagram Algebra, and An Invariant for Tied Links”*

**11:00 AM:** Aya Elhabashy - *“Multiplier Sequences and Diagonal Operators: A Study of Non-Classical Orthogonal Polynomial Solutions and Their Associated Sequences”*

**11:15 AM:** Riley White - *“Sums of Gegenbauer Polynomials”*

## Session K: Room 215

**10:30 AM:** Andrew Villarreal - ***“The Impact of Censoring LGBTQ+ Themes in Children’s Literature: Perspectives From LGBTQ+ Parents”***

*Additional Authors: Lauren Dial Ph.D.*

**10:45 AM:** Dahlia Ramirez - ***“Examination of an Abduction Prevention Safe Word Intervention for School-Aged Children”***

*Additional Authors: Marianne Jackson*

**11:00 AM:** Musa Dajani - ***“Investigating Sodium Levels in Fresno Unified School Lunches and Their Impact on Children's Health and Future Wellness ”***

*Additional Authors: Donna Badr, Maria Torres*

**11:15 AM:** Derek Madden - ***“Yoga postures in wild howler monkeys of Nicaragua”***

*Additional Authors: Erinn Madden, Sierra Madden*

**11:30 AM:** Keyora Wharry - ***“The nematicide effect of chalcones in *Caenorhabditis elegans* do not involve the oxidative stress or neuropeptide pathways of the nematode.”***

## Plenary Session: Room 105

**12:10 PM:** Olivia Soghomonian - *“From the Caucasus to Venice: Depicting Armenian Carpets in Italian Renaissance Art”*

**12:22 PM:** Ayuba Abaka - *“Identification of genes responsible for Caenorhabditis elegans resistance to Chalcone 17 and 30 using CRISPR-Cas9”*

*Additional Authors: Quynh Nguyen, Ramakrishna Kandi and Alejandro Calderón-Urrea*

**12:34 PM:** Keran Chen - *“The Effects of Mindfulness Meditation on Mechanisms of Attentional Control in Young and Older Adults”*

*Additional Authors: Andy Jeesu Kim, Keran Chen, Mara Mather*

**12:46 PM:** Mona Sandoval - *“Experiential Influences on Modifying the Better-Than and Worse-Than Average Effects”*

## **Session L: Room 105**

**01:30 PM:** Alyssa Cantu - *“Farm Workers' Access to Healthcare in California's Central Valley ”*

**01:45 PM:** Kaylin Prayitno - *“Assessing the Educational and Training Needs of U.S. Dairy Processors”*

*Additional Authors: Kaylin Prayitno, Jamie Levitt*

**02:00 PM:** Jessica Perez - *“Examining Teachers' Perceptions of Psychedelics in California's Central Valley: A Multi-Drug Comparative Study”*

*Additional Authors: Martin Shapiro, PhD*

**02:15 PM:** Danielle Vu - *“Gender-Affirming Care is Life-Affirming Care: Transgender Patient Experiences with Discrimination in Healthcare Settings”*

## Session M: Room 206

**01:15 PM:** Hyeyoung Maeng - ***“Transforming Studio Art Education: Integrating AI in Studio Art Courses”***

*Additional Authors: Thomas Andrade (undergraduate art student), Moises Gante (undergraduate art student), Daisy Bravo (undergraduate art student)*

**01:45 PM:** Sarah Sevy - ***“Integrating Cognitive, Social, and Algorithmic Factors: A New Framework for Assessing AI-Generated Content Credibility”***

**02:00 PM:** Zoe Miller - ***“Eating Gabagool With Hook Hands: A Powerful Look at Disability Representation in Popular TV”***

**02:15 PM:** Vania Ryan - ***“The Impact of Class Size on Supporting Students with Extensive Needs: Special Education Teachers’ Perspectives”***

**01:30 PM:** Xavier Bueno - ***“AI Music and You: Creativity and Ethics Behind Using AI in Modern Music”***

## **Session N: Room 207**

**01:15 PM:** Madelyn Snead - ***“Cost Communication on University Websites: Impacts on Student Users”***

**01:30 PM:** Katelyn Garcia - ***“How Strong is the Effect of Caffeine on Anxiety? Re-Evaluating a Recently Published Meta-Analysis”***

*Additional Authors: Katelyn Garcia, Paul C. Price Ph.D, and Martin S. Shapiro Ph.D*

**01:45 PM:** Brianne Elizalde - ***“Assessing Preference for Prompt Type Using a Concurrent Chains Design”***

*Additional Authors: Marianne Jackson, Ph.D., BCBA-D, Brianne Elizalde, BCaBA*

**02:00 PM:** Brandi Holcomb - ***“Title: A Meta-Analysis of Impostor Phenomenon and Socioeconomic Status”***

*Additional Authors: Makayla B. Payne, Paul C. Price*

**02:15 PM:** Ashley Ratcliff-Winn - ***“Parental Feeding Practices Among Latinx Families: Impacts of Acculturation and Food Insecurity”***



## Session O: Room 214

**01:15 PM:** Abbas Dadawalla - **“Chemical Composition Analysis and Purification of Central Valley Plant Extracts”**

*Additional Authors: Danya Sumrein, Daniel Hidalgo, Vang Yang, Shaur Herng Chong, Qiao-Hong Chen*

**01:30 PM:** Shailey Shah - **“Analyzing Human Health Effects of Per- and Polyfluoroalkyl Substances (PFAS)”**

**01:45 PM:** Dapinder Hans - **“Examining the Effects of High Saturated and Unsaturated Fats Diets on Tau-linked Neurodegeneration and Behavioral Decline in *Drosophila melanogaster*.”**

**02:00 PM:** Ismael Abdullah Hernandez - **“Modeling Traumatic Brain Injury in *Drosophila melanogaster* Through Behavioral and Lifespan Analyses”**

*Additional Authors: Eduardo Garcia, Jolene Uribe*

**02:15 PM:** Hassoon Sarwar - **“Machine Learning-Based Prediction of Inherited Structural Variants Across Familial Generations”**

*Additional Authors: Mario Bañuelos, Ph.D.*

**02:30 PM:** Amna Khan - **“Neurological Deficits in Starved *Drosophila melanogaster*”**

*Additional Authors: David D. Lent*

## Session P: Room 215

**01:15 PM:** Prabhjot Gill - **“The Hidden Trigger: Bicarbonate Role in Enhancing Cyanobacterial Neurotoxicity in Fruit Flies ”**

*Additional Authors: Prabhjot K. Gill and Joy J. Goto, Ph.D.*

**01:30 PM:** Arcana O'Regan - **“Improving Polyethylene Bioremediation: Enhancing Surface Oxidation Using Radio Frequency Plasma”**

*Additional Authors: Morgan J. Hawker Ph.D.*

**01:45 PM:** Avneet Purewal - **“Plasma-Activated Collagen with Immobilized Eugenol for Wound Healing”**

*Additional Authors: Dr. Morgan Hawker*

**02:00 PM:** Naylene Velasquez - **“Innovating Postoperative Dental Care with Plasma-Enhanced Chemical Vapor Deposition”**

*Additional Authors: Haylee McFall*

**02:15 PM:** Mina Abdelmessih - **“Renewable Polymers for Biomedical Applications: Restricting Hydrophobic Recovery Following Nitrogen Plasma Treatment”**

*Additional Authors: Carlos Pizano, Morgan J. Hawker PhD.*

**02:30 PM:** Nicholas Shows - **“Reducing Hydrophobic Recovery of Oxygen Plasma-Treated PEEK”**

*Additional Authors: Mikko Mowatt*