



California State University **Chico**
Graduate Studies

38th Annual Student Research Symposium

Tuesday, March 5, 2024 | 5–9 p.m. | Science Building

An Interdisciplinary Showcase of Undergraduate & Graduate Research

Event & Presenters Schedule

5:00 to 5:20 p.m. – Welcoming Remarks, President Perez

5:30 to 7:00 p.m. – 3-Minute Presentations

6:30 to 7:30 p.m. – Poster Session

7:15 to 8:50 p.m. – 10-Minute Presentations

8:50 p.m. – *Announcing the 3-Minute and Poster Session Winners*

*(10-Minute Presentations will not be announced until the following day.
Judges need more time to deliberate for these presentations)*

Appetizers – 5:00 p.m.

Dinner Buffet – 6:30 to 9:00 p.m.

POSTER PRESENTATION
SCIENCE BUILDING | LOBBY

Interdisciplinary – Undergraduate & Graduate
6:30 to 7:30 p.m.

Presenter: **Celia Alejandre**, Child Development, Undergraduate
Presentation Title: *Butte County Hmong Youth Wellbeing Mixed Methods Study*
Faculty Mentor: Shelly Hart

Presenter: **Sonia Benitez**, Animal Science, Undergraduate
Presentation Title: *Effects of Commercially Available Essential Oil Blend on Pregnancy Rates and Heat Stress in Summer Brew Ewes*
Faculty Mentor: Celina Phillips

Presenter: **Taryn Chima**, Animal Science, Undergraduate
Presentation Title: *Effects of Essential Oil Blend on Fiber Digestibility in Lambs*
Faculty Mentor: Celina Phillips

Presenter: **Emmanuel Gallegos**, Biochemistry, and **Rene Sabala**, Chemistry, Undergraduates
Presentation Title: *Synthesis of Anthelmintic Drugs with Increased Efficacy for Enhanced Parasite Control*
Faculty Mentor: Carolynn Arpin

Presenter: **Carolina Garcia**, Chemistry, Undergraduate
Presentation Title: *Coumarin-Carbamate as Potential Inhibitors of Acetylcholinesterase*
Faculty Mentor: Carolynn Arpin

Presenter: **Sonia Quintero**, MPA, Graduate
Presentation Title: *Accommodation of Neurodivergence in Higher Education*
Faculty Mentor: Charles Turner

Presenter: **Alexander Singelis**, Psychology, Undergraduate
Presentation Title: *Hallucinogenic-Assisted Therapy, Current Research and Future Potential: A Literature Review*
Faculty Mentor: Andres Garcia-Penagos

Presenter: **Jennifer Trujillo**, Psychology, Undergraduate
Presentation Title: *The Impact of Working Memory Load on Distractor Suppression*
Faculty Mentor: Bo Yeong Won

Presenter: **Michael Pratt** (non-competitor)
Presentation Title: *MATH 130 Exploratory Data Analysis (EDA) Final Project: GPA Analysis for Graduate Admissions at Chico State*

Presenter: **Rosemary White** (non-competitor)
Presentation Title: Preliminary Outcomes: Adelante Postbaccalaureate Pipeline Program

3-MINUTE PRESENTATION
SESSION 1 | SCIENCE BUILDING, ROOM 130

Interdisciplinary – Undergraduate
5:30 to 7:00 p.m.

Presenter: **Karen Contreras**, Biochemistry, Undergraduate
Presentation Title: *The Role of Testosterone in Idiopathic Scoliosis Severity*
Faculty Mentor: Kristen Gorman

Presenter: **Jocelyn Kaveney**, Exercise Physiology, Undergraduate
Presentation Title: *Nightshift Worker Study*
Faculty Mentor: Ryan Perkins

Presenter: **Jessica Moody**, Microbiology, Undergraduate
Presentation Title: *Fungal Aerobiota Diversity at Big Chico Creek Ecological Reserve*
Faculty Mentor: Gerald Cobian

Presenter: **Brandon Mangunsong**, Microbiology, and **Jossue Ruiz**, Biology,
Undergraduates
Presentation Title: *Covering Our Megabasis: Confirming Osteoblast Extraction*
Faculty Mentor: Kristen Gorman

Presenter: **Andrew Richards Oort**, Exercise Physiology, Undergraduate
Presentation Title: *Cold-Pressor Testing Use in Exercise Physiology*
Faculty Mentor: Ryan Perkins

Presenter: **Justin Brito**, Child Development, Undergraduate
Presentation Title: *The Impact of ACEs on GPA Mediated by College Measures of Success*
Faculty Mentor: Shelley Hart

Presenter: **Aurora Barkley**, Psychology, Undergraduate
Presentation Title: *Exposure to Thinness- and Fitness-Related TikTok Videos and the Impact on Food Intake*
Faculty Mentor: Andres Garcia-Penagos

Presenter: **Julia Gonsalves**, Child Development, Undergraduate
Presentation Title: *College Students' Self-Concept Clarity in Role of Perceived Stress Mediated by Emotion Regulation*
Faculty Mentor: Shelley Hart

Presenter: **Rene Sabala**, Chemistry, Undergraduate
Presentation Title: *Synthesis of Anthelmintic Drugs with Increased Efficacy for Enhanced Parasite Control*
Faculty Mentor: Carolyn Arpin

Presenter: **Kenneth Hodges**, Exercise Physiology, Undergraduate
Presentation Title: *A Holistic, Therapeutic Approach to Managing Parkinson's Disease*
Faculty Mentor: Feng He

Presenter: **Bryan Vallejo**, Animal Science, Undergraduate
Presentation Title: *Lamb Performance from Ewes Fed Essential Oil Blend During Summer Gestation*
Faculty Mentor: Celina Phillips

Presenter: **Julie O'Mahony**, Nursing, Undergraduate
Presentation Title: *Fertility, Cancer, Nutrition, and Diet (FECAND) Study*
Faculty Mentor: Cynthia Klobodu

Presenter: **Amy Beer**, Social Work, Undergraduate
Presentation Title: *Visualizing Target Population Outreach: Vast Data and Geographical Regions*
Faculty Mentor: Heather Werner

Judges: **Kwadwo Boakye**, Public Health and Health Services Administration
Andrew D'Lugos, Kinesiology
Raquel Krach, Agriculture
Michael Pratt, Graduate Studies

3-MINUTE PRESENTATION
SESSION 2 | SCIENCE BUILDING, ROOM 131

Interdisciplinary – Graduate
5:30 to 7:00 p.m.

Presenter: **Levi Medina**, Biological Sciences, Graduate

Presentation Title: *Iron Oxidization in Leptothrix Cholodnii SP-6*

Faculty Mentor: Emily Fleming

Presenter: **Joscelin Ortega Soto**, Biological Sciences, Graduate

Presentation Title: *The Effects of Prenatal Nicotine Exposure: Fear Memory and Extinction, and the Molecular Mechanisms*

Faculty Mentor: Kodeeswaran Parameshwaran

Presenter: **Michaela Flynn**, Biological Sciences – Microbiology, Graduate

Presentation Title: *Analyzing the Role of Lcho_0618 In Leptothrix Cholodnii Sheath Production*

Faculty Mentor: Emily Fleming

Presenter: **Arely Saldana**, Psychology, Graduate

Presentation Title: *Pre-Trial Publicity and Mock Jury Decision-Making Moderated by Delay*

Faculty Mentor: Linda Kline

Presenter: **Alejandro Marquez**, Biological Sciences, Graduate

Presentation Title: *Mitoregulin and its Effect on Pancreatic Beta Cells Under Glucolipotoxic Conditions*

Faculty Mentor: David Keller

Presenter: **Tawny Aerial Bolinas**, Biological Sciences, Graduate

Presentation Title: *Priority Effects of Foliar Fungal Endophytes in Leaf Litter Decomposition*

Faculty Mentor: Gerald Cobian

Presenter: **Jose Gonzalez-Ayala**, Psychological Science, Graduate

Presentation Title: *Perceived Gender Norms and Condom Use: Gender Status Threats and Sexual Decision-Making*

Faculty Mentor: Patrick Johnson

Presenter: **Meredith Berdeja**, Biological Sciences, Graduate
Presentation Title: *Investigating the Impact of Chytrid Infection on Skin Fungal Communities in Sierra Nevada Yellow-Legged Frogs of the Plumas National Forest*
Faculty Mentor: Gerald Cobian

Presenter: **Gracie Dupuis**, Kinesiology – Exercise Physiology, Graduate
Presentation Title: *Effects of Acute Sleep Reduction on Inflammation in Healthy Adults*
Faculty Mentor: Ryan Perkins

Presenter: **Paola Amezcua**, Biological Sciences, Graduate
Presentation Title: *Characterization of Scoliosis Bone: Is it defective?*
Faculty Mentor: Kristen Gorman

Presenter: **Avery Lambrite**, Kinesiology, Graduate
Presentation Title: *Electrocardiography as A Tool to Explore Cardiovascular Health*
Faculty Mentor: Ryan Perkins

Presenter: **Stephanie Duarte-Amezcua**, Biological Sciences, Graduate
Presentation Title: *Understanding Growth Abnormalities in Idiopathic Scoliosis*
Faculty Mentor: Kristen Gorman

Presenter: **Dylan White**, Psychological Science, Graduate
Presentation Title: *Microtemporal Changes in Delay Discounting: An Ecological Momentary Assessment Approach*
Faculty Mentor: Patrick Johnson

Presenter: **Daniel Berumen**, Psychological Science, Graduate
Presentation Title: *Unraveling Spirituality as a Nexus*
Faculty Mentor: Andres Garcia-Penagos

Presenter: **Daniel Maines**, Psychological Science, Graduate
Presentation Title: *Graduate Today!*
Faculty Mentor: Patrick Johnson

Presenter: **Maggie Farlow**, History, Graduate
Presentation Title: *Butte County Women's Community, Agricultural, and Business Development, 1860-1910*
Faculty Mentor: Alisa Wade

Presenter: **Evan Hoeft**, Geosciences, Graduate
Presentation Title: *Methane-powered Animals at a 370 Million-Year-Old Hydrocarbon Seep*
Faculty Mentor: Russell Shapiro

Presenter: **Emily Mansilla**, Psychological Science, Graduate
Presentation Title: *Know Thy Future Self: Effects of a Future-Oriented Guided Imagery on Self-Continuity*
Faculty Mentor: Patrick Johnson

Presenter: **Dulshi Fernando**, Psychological Science, Graduate
Presentation Title: *Effects of Emoji Skin Tone & Gender in a Peer-to-Peer Online Learning Scenario*
Faculty Mentor: Marie Lippmann

Presenter: **Drew Jones**, Kinesiology, Graduate
Presentation Title: *Standardized Versus Neurodiversity-Affirming Motor Assessment Conditions for Autistic Children*
Faculty Mentor: Laynie Case

Judges:
Michael Ennis, Psychology
Robert Griffin-Nolan, Biology
Cheng Tu Hsieh, Kinesiology
Michele Mittman, CEMUR

10-MINUTE PRESENTATION
SESSION 1 | SCIENCE BUILDING, ROOM 142

Interdisciplinary – Undergraduate
7:15 to 9:00 p.m.

Presenter: **Yolanda Reyes and Brittany Reyes**, Computer Engineering, Undergraduate
Presentation Title: *Does My Water Glow?*
Faculty Mentor: Paul Bailey

Presenter: **Samaher Shaheen**, Mechanical Engineering, Undergraduate
Presentation Title: *The Impact of Dehydration Methods on PEGDA Hydrogel Properties in Bone Tissue Engineering*
Faculty Mentor: Ozgul Yasar

Presenter: **Isa Cook**, Advanced Manufacturing and Applied Robotics, Undergraduate
Presentation Title: *Characterization of PLA-Shiitake Composite*
Faculty Mentor: Dylan Sander

Presenter: **Sam Lloyd-Harry**, Mechanical Engineering, Undergraduate
Presentation Title: *Effects of Varying PEGDA: PDMS Ratios and Polymer Concentration on the Mechanical Properties of Tissue Engineering Scaffold*
Faculty Mentor: Ozgul Yasar

Presenter: **Paul Maready**, Mechanical Engineering, Undergraduate
Presentation Title: *Spent Hops & PLA/PHA Composite Consolidation and Implementation*
Faculty Mentor: Dylan Sanders

Judges: **Kevin Buffardi**, Computer Science
Corey Cole, Mechanical and Mechatronic Engineering and
Advanced Manufacturing
Kurtis Kredo, Electrical and Computer Engineering

10-MINUTE PRESENTATION
SESSION 2 | SCIENCE BUILDING, ROOM 126

Interdisciplinary – Undergraduate
7:15 to 9:00 p.m.

Presenter: **Sydney Paillon**, Psychology, Undergraduate
Presentation Title: *It's TikTok, Why Aren't We Dancing?: Exploring the Impact of Influencer Authority, Identification, and Disclaimers on Health Information Endorsement and Self-Diagnosis of Mental Disorders*
Faculty Mentor: Kevin Click

Presenter: **Luke Richardson**, Psychology, Undergraduate
Paper Title: *The Health Implications of Using Inclusive Signals and Positive Patient-Provider Interactions for Sexual and Gender Minorities*
Faculty Mentor: Kevin Click

Presenter: **Aaron Schwartz**, Political Science, Undergraduate
Paper Title: *Breaking the Silence: Antisemitism in America*
Faculty Mentor: Diana Dwyre

Presenter: **Christina Carvalho, Mandy Peterson, and Daniela Schumacher**
Psychology, Undergraduate
Paper Title: *Failure to Launch Emotion Regulation? Without a Default Option of “Doing Nothing,” Participants Frequently Chose to Regulate Their Emotions Effectively*
Faculty Mentor: Michael Ennis

Judges: **Shelley Hart**, Child Development
Kim Jaxon, English
Zanja Yudell, Philosophy

10-MINUTE PRESENTATION
SESSION 3 | SCIENCE BUILDING, ROOM 250

Interdisciplinary – Graduate
7:15 to 9:00 p.m.

Presenter: **Isabella Avalos**, Psychological Science, Graduate
Presentation Title: *Exposure to Illicit Substances of Abuse, Impulsivity, and Risk-Taking in Abstinent College Students*
Faculty Mentor: Patrick Johnson

Presenter: **Recamier Jauregui Ocampo**, Psychological Science, Graduate
Presentation Title: *Determining the Impact of Adolescent Stress on Opioid Use Vulnerability*
Faculty Mentor: Shawn Bates

Presenter: **Angela Adade**, Nutritional Science, Graduate
Presentation Title: *Evaluating TikTok's Impact on Nutrition Literacy and Food Attitudes*
Faculty Mentor: Lauren McNamara

Presenter: **Sara Beacham**, Kinesiology, Sport and Exercise Psychology, Graduate
Presentation Title: *Sleep Education Interventions for Collegiate Athletes: Effects on Competitive State and Trait Anxiety*
Faculty Mentor: Aubrey Newland

Presenter: **Elly O'Bryant**, Psychological Science, Graduate
Presentation Title: *Social Influences on Cocaine Reward in Adolescent Mice*
Faculty Mentor: Shawn Bates

Presenter: **Airele Muscetta**, Nutritional Science/Nutrition Education, Graduate
Presentation Title: *Caffeine and Alcohol Consumption Among Chico State University Students: Implications for Sleep Quality*
Faculty Mentor: Keiko Goto

Judges: **Feng He**, Kinesiology
Emily Fleming, Biology
Stephanie Machado, Public Health and Health Services Administration
Andres Garcia-Penagos, Psychology

10-MINUTE PRESENTATION
SESSION 4 | SCIENCE BUILDING, ROOM 247

Interdisciplinary – Graduate

7:15 to 9:00 p.m.

Presenter: **Isabel Araujo**, Anthropology, Graduate
Presentation Title: *Making Stewardship First: Collaboration and Collections in Museum Policy*
Faculty Mentor: April Kamp-Whittaker

Presenter: **Tiemei Tang**, Business Economics and Public Administration, Graduate
Presentation Title: *Leveraging Online Reviews for New Product Development in E-commerce*
Faculty Mentor: Jianliang Hao

Presenter: **Emily Mansilla**, Psychological Science, Graduate
Presentation Title: *Measuring HIV Risk Behavior in the Laboratory: A Tale of Two Tasks*
Faculty Mentor: Patrick Johnson

Presenter: **Allison Rivers**, Social Work, Graduate
Presentation Title: *Centering Youth as Co-Researchers to Map Community Assets*
Faculty Mentor: Susan Roll

Presenter: **Abhiseck Birajdar, Nihar Kamble, Gitesh Pawar, and Pranjal Pimpale**
Computer Science, Graduate
Presentation Title: *Transforming Education for the Future*
Faculty Mentor: NA

Judges: **JoAna Brooks**, Graduate Studies/CEMUR
Greg Madonia, Economics
Synthia Shin, Marketing

10-MINUTE PRESENTATION
SESSION 5 | SCIENCE BUILDING, ROOM 244

Interdisciplinary – Graduate
7:15 to 9:00 p.m.

Presenter: **Jackson Whitlow**, Kinesiology, Graduate
Presentation Title: *A Technology-Assisted MSPE Intervention with Collegiate Women's Volleyball*
Faculty Mentor: Aubrey Newland

Presenter: **Evan Drake**, Computer Science, Graduate
Presentation Title: *Computing Conscious*
Faculty Mentor: Richard Tillquist

Presenter: **Eden Pikowski**, Geosciences, Graduate
Presentation Title: *Paleoecology of Hydrocarbon Seeps at Blue Ridge, Colusa County, California*
Faculty Mentor: Russell Shapiro

Presenter: **Sangyup Lee**, Kinesiology, Graduate
Presentation Title: *Application of Qualitative Movement Diagnosis on Sprint Start*
Faculty Mentor: Cheng Tu Hsieh

Presenter: **Allison Mego**, Wildland Management Program, Graduate
Presentation Title: *A Feasibility Study: Reintroduction of Tule Elk in BCCER*
Faculty Mentor: Don Hankins

Presenter: **Rory Ferguson**, Psychological Science, Graduate
Presentation Title: *The Characteristics of Distractor Templates Arising from Learned Suppression*
Faculty Mentor: Bo Yeong Won

Judges: **Gerald Cobain**, Biology
Ryan Perkins, Kinesiology
Susan Roll, Graduate Studies/Social Work

10-MINUTE PRESENTATION
SESSION 6 | SCIENCE BUILDING, ROOM 125

Interdisciplinary – Graduate
7:15 to 9:00 p.m.

Presenter: **Ashley Macias**, Social Work, Graduate
Presentation Title: *The Intersection of Identity, Family, Mental Health, and Education in Mexican American Adolescents*
Faculty Mentor: Molly Calhoun

Presenter: **Rocci Vizzusi**, Psychological Science, Graduate
Presentation Title: *Exploring the Mechanisms Linking Childhood Trauma to Adult Depression*
Faculty Mentor: Alexander Wong

Presenter: **Hunter Casperson**, Interdisciplinary, Graduate
Presentation Title: *Communication Across Divide*
Faculty Mentor: Aaron Quinn

Presenter: **Arely Saldana**, Psychological Science, Graduate
Presentation Title: *Beliefs About End-of-Life Decisions for Companion Animals*
Faculty Mentor: Linda Kline

Presenter: **Letty Mejia**, Social Work, Graduate
Presentation Title: *COVID-19 Lessons Learned from Latin-x Social Workers in Rural Communities*
Faculty Mentor: Judy Vang

Presenter: **Mariana Joss**, Psychological Science, Graduate
Presentation Title: *Effects of Parental Modeling and Social Media on Attitudes Towards Marriage*
Faculty Mentor: Kevin Click

Judges: **Michelle Mussuto**, Meriam Library
Matt Thomas, Political Science and Criminal Justice
Lori Weber, Political Science and Criminal Justice