

CSU Student Research Competition Session Award Winners – 2019
1st and 2nd place

Session 1 Behavioral and Social Sciences, Undergraduate

Yohanna Brown, *CSU Long Beach* **1st**

The Role of Glucagon Like Peptide 1 Receptors on the Rewarding Effects of Oxycodone in Male and Female Adolescent Rats

Silas Zelny, *CSU Chico* **2nd**

The Role of Social and Familial Closeness on Reducing Transphobia

Session 2 Behavioral and Social Sciences, Graduate

Julia Moon, *San Francisco State* **1st**

Time and Trepidation: An Examination of Thoughts and Feelings about the Past, Present, and Future and Anxiety among Adolescents

Rosa Hunt, *CSU San Marcos* **2nd**

Children's Decision to Trust and Reciprocate Information: Does Accuracy Outweigh Intentionality in Children's Reasoning?

Session 3 Biological and Agricultural Sciences, Undergraduate

Sarah Caballero, *Cal Poly Pomona* **1st**

Impact of Protein Type and Maillard Conjugation on Nanoemulsion Formation and Stability at Isoelectric Point

Thomas Nhu, Paul Maier, *Cal Poly San Luis Obispo* **2nd**

Inglorious Baskers: Comparative Thermoregulative Behavior of Coastal and Inland Populations of Pacific Rattlesnakes

Session 4 Biological and Agricultural Sciences, Graduate

Janam Dave, *Cal Poly Pomona* **1st**

Efficacy of Intravenous vs. Aerosol AmBisome Therapy for Murine Pulmonary Aspergillosis

Ryan Buck, *San Diego State* **2nd**

Interspecies Hybridization in Pinyon Pines and its Consequences on Symbiotic Ectomycorrhizal Communities

Session 5 Business, Economics and Public Administration, Undergraduate and Graduate

Brishna Nader, Cris de los Santos, *CSU Monterey Bay* **1st**

The Role of Internal LOC in Driving Pro-Environmental Behavior in Hospitality

Sambhav Gupta, *San José State* **2nd**

Artificially Intelligent (AI) Tutors in the Classroom: A Need Assessment Study of Designing Chatbots to Support Student Success

Session 6 Engineering and Computer Science, Undergraduate

Gerardo Maldonado, Garrison Kanazawa, Stuart Geyer, Johnathan Hai,
Minna Mattis, *Cal Poly Pomona* *1st*
Potential Repurposing of Reverse Osmosis Concentrate for Energy Applications

Eliana Aguilar, *CSU Chico* *2nd*
Effect of Biomass Ash and Cementitious Materials on Air Content in Concrete

Session 7 Engineering and Computer Science, Graduate

Sarah Ortega, *San José State* *1st*
Exploring a Hybrid Design for a Short to Medium Range Transport Aircraft

Nha Uyen Huynh, Richard Lee *San Diego State* *2nd*
Novel In-situ Dynamic Mechanical Characterization using Terahertz Waves

Session 8 Health, Nutrition, and Clinical Sciences, Undergraduate

Jagjeet Gil, *CSU Bakersfield* *1st*
Increased Spatiotemporal Gait Asymmetry in Older Adults is Related to Fall Risk and Falls

Kimberly Luna, *CSU Northridge* *2nd*
Prevalence of Non-Academic Internet Use and its Relationship to Academic Achievement and Health: Findings from a Southern California University

Session 9 Humanities and Letters, Graduate

Avery Amerson, *CSU Long Beach* *1st*
Wittgenstein, Extended Cognition, and the Problem of Other Minds

David Hlusak, *San Francisco State* *2nd*
First Came the Sound

Session 10 Physical Sciences and Mathematics, Undergraduate

Vanshika Gupta, *San José State* *1st*
Investigating Macromolecular Structures for the Transformation of Greenhouse Gases into Liquid Fuels

Yashank Varshney, Neha Singh, *CSU East Bay* *2nd*
What is Particle Physics?

Session 11 Physical and Mathematical Sciences, Undergraduate

Onkar Phul, Owen Roth, *Stanislaus State* *1st*
Characterization of Toluene o-Xylene Monooxygenase for Chlorobenzene Degradation

Gabriel Lopez, *CSU San Bernardino* *2nd*
Self Assembling DNA Wheel Graph

Session 12 Behavioral and Social Sciences, Undergraduate

Torrey Sanseverino, Cal Poly San Luis Obispo **1st**
Utilizing Mixed Methods for Development: Engineering Water Projects

Kendra Paquette, Jessica Barragan, CSU Fullerton **2nd**
When a Perpetrator Wears a Disguise: Which Lineup is Best to Test Eyewitness Memory

Session 13 Behavioral and Social Sciences, Graduate

Alyssa Dye, Stanislaus State **1st**
Paternal Perinatal Depression: Barriers to Treatment and the Influence of Social Support on Help-seeking

Yesenia Mendoza, Cal State LA **2nd**
Exploring how Oncologists Communicate about Treatment

Session 14 Biological and Agricultural Sciences, Undergraduate

My Tran, San Diego State **1st**
Mechanical Injury Alters APP and BACE-1 Interaction in hiPSC-derived Neurons

Chloe Welch, Sacramento State **2nd**
The Autism-Associated Chromatin Modifier, *Chromodomain Helicase DNA Binding Protein 8/kismet*, Affects Axon Guidance and Behavioral Phenotypes in *Drosophila Melanogaster*

Session 15 Biological and Agricultural Sciences, Graduate

Evelyn Bond, CSU Fullerton **1st**
The Role of Genital Papillas in the Reproductive Biology of Male Surfperches (*Embiotocidae; Teleostei*)

Gabriel Goff, Humboldt State **2nd**
Physiological Responses of *Quercus garryana* to Conifer Encroachment and Removal in Northern California

Session 16 Creative Arts and Design, Undergraduate and Graduate

James Getomer, San Francisco State **1st**
Project Daybreak

David Madrid, CSU Bakersfield **2nd**
Symbolism in Debussy: Tracing Debussy's Depiction of Symbolist Poetry

Session 17 Engineering and Computer Science, Graduate

Thilakraj Shivakumar, CSU Fullerton

1st

The Effects of Process Parameters on Mechanical Properties in Liquid Holographic Volumetric Additive Manufacturing Process

Ghanshyam Mishra, San Diego State

2nd

Wide Angle Beam Steering Cylindrical Parabolic Reflector with Phased Array as a Feed Source for Ku-Band Applications

Session 18 Education, Undergraduate and Graduate

Jennifer Montepeque Diaz, CSU Long Beach

1st

Cebolla que Hace Llorar, da Sabor a la Comida: Promoting College Enrollment for Latinas with Disabilities

Khanh Tran, San Francisco State

2nd

The Alma Project: Reflective Journaling to Promote Belonging and Persistence in STEM

Session 19 Health, Nutrition, and Clinical Sciences, Graduate

Victoria Smith, Cal Poly San Luis Obispo

1st

Western Diet-Induced Dysbiosis is Associated with Intestinal Hyperplasia and Dysregulation of FXR-FGF19 Gene Expression in Juvenile Iberian Pigs

Cathryn McCandless, Sacramento State

2nd

Therapeutic Intervention for a 3-Year-Old Girl with Cask Genetic Disorder

Session 20 Humanities and Letters, Undergraduate and Graduate

Scott Thiele, San Diego State

1st

A Gendered Perspective of the Actions of Formerly Enslaved Men and Women in the American South in the 1860s

Jaedyn Baker, CSU Dominguez Hills

2nd

Unchecked Curiosity and "Masculine" Science: Foes of a Domestic Eden in Mary Shelley's *Frankenstein* (1831)

Session 21 Interdisciplinary, Undergraduate and Graduate

Margaret Stack, San Diego State

1st

Assessing the Distribution and Impact of Marine Endocrine Disrupting Compounds in the Critically Endangered California Condor and Marine Mammals

Moiz Mir, Sacramento State

2nd

Companion Planting as an Understory Restoration Strategy Along the American River

Session 22 Physical and Mathematical Sciences, Graduate

Brandon Van Over, *San Francisco State*

1st

On Arithmetical Numerical Monoids with Some Generators Omitted

Phillippe Ly, Codi Pace, *CSU Long Beach*

2nd

Rapid Enantiomer Ratio Determination of P-Chiral Compounds with $\text{Eu}(\text{hfc})_3$