



33RD ANNUAL

CSUSB Student Research Competition

February 1st, 2019
Santos Manuel Student Union





CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

Office of Student Research



**DR. CHRISTINA HASSIJA,
OSR DIRECTOR**

Dear Colleagues and Students,

It is with great pleasure that I welcome the students and faculty of California State University, San Bernardino (CSUSB) to the 33rd annual CSUSB Student Research Competition. The CSUSB Student Research Competition provides our undergraduate and graduate students with a unique opportunity to showcase their outstanding research and creative activities and compete to represent our campus at the 33rd Annual California State University Student Research Competition. This year's CSU state-wide competition will be held at California State University, Fullerton on April 26-27th, 2019. I look forward to identifying, supporting, and accompanying the delegates who will go on to represent our campus.

I would like to thank all of the students who are participating in our competition today – your hard work is inspiring and makes our campus proud. I sincerely hope that today's conference attendees enjoy our students' presentations, take pride in their efforts, and offer them congratulations on their successes. I would also like to extend sincere gratitude to the faculty mentors and our faculty jurors who consistently go above and beyond to support our students and the activities of our office. Our continued growth and success would not be possible without your passion, generosity, and commitment.

Thank you all for your support and attendance today, and I hope you will continue to participate in future OSR events.

Sincerely,
Christina M. Hassija, Ph.D.



FACULTY JURORS

Thank you to the following faculty who have volunteered to serve as jurors for this year's CSUSB Student Research Competition

Dr. Dionisio Amodeo
Dr. Manijeh Badiee
Dr. Sara Callori
Dr. Steven Childs
Dr. Thomas Corrigan
Ms. Ariana Cano
Dr. Nicole Dabbs
Dr. Miriam Fernandez
Dr. Stacy Forcino
Dr. Jacob Jones
Dr. Rajrani Kalra
Dr. Jasmine Lee
Dr. Codi Lazar
Dr. Jeremy Mallari

Dr. Nerea Marteache
Dr. Elizabeth Martin
Dr. Edna Martinez
Dr. David Maynard
Dr. Miranda McIntyre
Dr. Salome Mshigeni
Dr. Sang Ouk Wee
Dr. Melika Kordrostami
Dr. Zachary Powell
Ms. Krystal Rawls
Dr. Jason Reimer
Dr. Jacqueline Romano
Dr. Wendy Smith
Dr. Jing Zhang
Dr. Renwu Zhang

Session I

Location: RM 215

Time: 9:30-10:45

College: Natural Sciences

Level: Undergraduate



PRESENTATION SCHEDULE

9:30 **Presenter(s):** Kendale Washington and Nathan Rittenhouse
Faculty Mentor: Dr. Paul Dixon
Department: Physics
Title: *Two-Dimensional Feedback Control & Spatio-temporal Estimation*

9:50 **Presenter(s):** Ngoc Huynh and Nohemy Celis
Faculty Mentor: Dr. Jeremy Mallari
Department: Biochemistry
Title: *Validating the Antimalarial Mechanism of Action of Small Molecule Inhibitors against Falcilysin using Conditional Knockdown Parasite Line*

10:10 **Presenter(s):** Gabriel Lopez
Faculty Mentor: Dr. Corrine Johnson
Department: Mathematics
Title: *Self Assembling DNA Wheel Graphs*

10:30 **Presenter(s):** Jennifer Gallardo
Faculty Mentor: Dr. Laura Newcomb
Department: Biology
Title: *Characterizing NP Mutant Interactions to Reveal Novel Antiviral Targets*

Session 2

Location: RM 216

Time: 9:30-10:25

College: Arts and Letters

Level: Graduate

9:30 **Presenter(s):** Aida Jimenez
Faculty Mentor: N/A
Department: Communications
Title: *Online dating: Relationships Forming*

9:50 **Presenter(s):** Rebekah Waddell
Faculty Mentor: Dr. Ahlam Muhtaseb
Department: Communications
Title: *The Benefits of Marketing with YouTube Influencers*

10:10 **Presenter(s):** Loydie Burmah
Faculty Mentor: Dr. Ahlam Muhtaseb
Department: Communications
Title: *They're All Going to Cancel You*

Session 3

Location: RM 217

Time: 9:30-10:45

College: Natural Sciences

Level: Undergraduate

- 9:30 **Presenter(s):** Cinthia Gazca
 Faculty Mentor: Dr. Laura Newcomb
 Department: Biology
 Title: *Characterizing Influenza NP Protein Interactions with Viral NS1 Factor*
- 9:50 **Presenter(s):** Sarah Handy and Maria Ceja
 Faculty Mentor: Dr. Tomasz Owerkowicz
 Department: Biology
 Title: *Skin and Bones or Just Skin?*
- 10:10 **Presenter(s):** Marvin Macharia
 Faculty Mentor: Dr. David Rhoads
 Department: Biology
 Title: *Cloning and Functionally Testing Agrobacterium Ilvd Genes which Encode and Enzyme in Amino Acid Biosynthesis*
- 10:30 **Presenter(s):** Nikolay Maslov
 Faculty Mentor: Dr. Jeremy Mallari
 Department: Biology
 Title: *Developing Chemical Tools to Investigate Falcilysin, an Essential Metalloprotease*

Session 4

Location: RM 218

Time: 9:30-10:45

College: Arts and Letters

Level: Graduate

- 9:30 **Presenter(s):** Yuyuan Chen
 Faculty Mentor: Dr. Ahlam Muhtaseb
 Department: Communications
 Title: *Exploring the Causes of a more Individualistic-oriented Pattern of Chinese Younger Generations*
- 9:50 **Presenter(s):** Heather Norwood
 Faculty Mentor: Dr. Mary Boland
 Department: English Composition
 Title: *Discourse as Performance*
- 10:10 **Presenter(s):** Nicole Moyer
 Faculty Mentor: Dr. Ahlam Muhtaseb
 Department: Communications
 Title: *Vaccine Communication: Issues of Institutional Trust and Health Literacy*
- 10:30 **Presenter(s):** Jannette Arroyo
 Faculty Mentor: Dr. Ahlam Muhtaseb
 Department: Communications
 Title: *Instructor Credibility: Aspects of Communication that Affect Instructor Credibility*

Session 5

Location: RM 215
Time: 11:30-12:45
College: Natural Sciences
Level: Undergraduate

- 11:30 **Presenter(s):** Kaylie Balvaneda
 Faculty Mentor: Dr. Christopher Hill
 Department: Kinesiology
 Title: *Motivational Climates in Personal Trainer-Client Relationships: Impact of Perceived Climate on Effort*
- 11:50 **Presenter(s):** Sean Christopher Bonilla
 Faculty Mentor: Dr. Nicole Dabbs
 Department: Kinesiology
 Title: *Relationship among Physiological, Perceptual, and Biomechanical Variables during Exercise on a Non-Motorized Treadmill In DII Cross-Country Athletes*
- 12:10 **Presenter(s):** Chanel Catunao
 Faculty Mentor: Dr. Nicole Dabbs
 Department: Kinesiology
 Title: *Performance-Related Characteristics of Elite Short Track Speed Skaters*
- 12:30 **Presenter(s):** Elizabeth Corella
 Faculty Mentor: Dr. Nicole Dabbs
 Department: Kinesiology
 Title: *Strength Profile of Elite Short Track Speed Skaters*

Session 6

Location: RM 216
Time: 11:30-12:05
College: Natural Sciences
Level: Graduate/Undergraduate

- 11:30 **Presenter(s):** Jose Uribe
 Faculty Mentor: Dr. Kimberley Cousins
 Department: Chemistry
 Title: *Croconic Acid: Surface and Electric Field influence on Deposition*
- 11:50 **Presenter(s):** Bryan Castillo
 Faculty Mentor: Dr. Sally McGill
 Department: Geology
 Title: *Preliminary Ages of Prehistoric Earthquakes on the Banning Strand of the San Andreas Fault, near North Palm Springs, California*

Session 7

Location: RM 217
Time: 11:30-12:45
College: Natural Sciences
Level: Undergraduate

- 11:30 **Presenter(s):** Ginny Park, Jordan Taylor, and Jasmine Rios
 Faculty Mentor: Dr. Cynthia Crawford
 Department: Biopsychology
 Title: *Fentanyl: The Effects of Early Exposure into Adulthood*
- 11:50 **Presenter(s):** Matthew Burroughs, Matthew Apodaca, and Joseph Brunch
 Faculty Mentor: Dr. Jacob Jones
 Department: Biopsychology
 Title: *Intraindividual Variability in Neuropsychological Performances Predicts Cognitive Decline in De Novo Parkinson’s Disease*
- 12:10 **Presenter(s):** Gurnoor Kaur
 Faculty Mentor: Dr. Nicole Bournias-Vardiabasis
 Department: Biology
 Title: *Neurotrophin Mimics Promote the Pluripotent State of Human Embryonic Stem Cells with Improved Clonal Survival*
- 12:30 **Presenter(s):** Aries Torres and Lourdes Ceja
 Faculty Mentor: Dr. Nicole Bournias-Vardiabasis
 Department: Biology
 Title: *Development of a Drosophila melanogaster Assay to Assess the Developmental Toxicity of Organophosphates*

Session 8

Location: RM 218
Time: 11:30-12:25
College: Arts and Letters/Education
Level: Graduate

- 11:30 **Presenter(s):** Asiria Arana
 Faculty Mentor: N/A
 Department: Communications
 Title: *Social Barriers of Communications of Children with Speech Disorders*
- 11:50 **Presenter(s):** Qi Guo, Tong Feng, and Lu Jia
 Faculty Mentor: Dr. Eun-Ok Baek
 Department: Instructional Technology
 Title: *The Effects of Mobile Application for English Speaking Learners*
- 12:10 **Presenter(s):** Alexandra Winner Bachus
 Faculty Mentor: Dr. Ahlam Muhtaseb
 Department: Communications
 Title: *Religion, Control and Power Through a Foucauldian Lens*

Session 9

Location: RM 215

Time: 1:30-2:45

College: Social and Behavioral Sciences
/Business

Level: Undergraduate

- 1:30 **Presenter(s):** Luis Velazquez
 Faculty Mentor: Dr. Daniel MacDonald
 Department: Economic
 Title: *Effects of Unemployment on Mortality Rate*
- 1:50 **Presenter(s):** Alberto Chavez
 Faculty Mentor: Dr. Rishabh Kumar
 Department: Economics
 Title: *Mindfulness on Campus: An Analysis of the Effectiveness of Meditation on Students at California State University, San Bernardino*
- 2:10 **Presenter(s):** Qinyu Zhang
 Faculty Mentor: N/A
 Department: Finance
 Title: *Company Research: Taobao*
- 2:30 **Presenter(s):** Michael Graham
 Faculty Mentor: Dr. Rishabh Kumar
 Department: Economics
 Title: *Income inequality in the U.S. Developmental Toxicity of Organophosphates*

Session 10

Location: RM 216

Time: 1:30-2:45

College: Social and Behavioral Sciences
Level: Graduate

- 1:30 **Presenter(s):** Sara Ledsema
 Faculty Mentor: Dr. Yvette Saavedra
 Department: History
 Title: *Living La Mala Vida: Transgressive Femininities, Morality and Nationalism in Mexican Los Angeles 1810-1850*
- 1:50 **Presenter(s):** Mernyll Manalo
 Faculty Mentor: Dr. Christina Hassija
 Department: Psychology
 Title: *The Role of Self-forgiveness and Self-compassion in the Relationship between Moral Injury and Psychological Distress among OEF/OIF Military Veterans*
- 2:10 **Presenter(s):** Elizabeth Rahmani and Mayra Barragan
 Faculty Mentor: Dr. Jacob Jones
 Department: Psychology
 Title: *Gastrointestinal Symptoms are Predictive of Trajectories of Cognitive Functioning in Parkinson's Disease*
- 2:30 **Presenter(s):** Nelly Zambrano
 Faculty Mentor: Dr. Dierdre Lanesskog
 Department: Social Work
 Title: *Developing a Community Plan to Prevent Child Abuse & Neglect in Rural Southern California*

Session 11

Location: RM 217

Time: 1:30-2:25

College: Social and Behavioral Sciences

Level: Undergraduate

- 1:30 **Presenter(s):** Natassja Martin
 Faculty Mentor: Dr. Ryan Keating
 Department: History
 Title: *Generations Apart: A Comparison of Veteran's Benefits*
- 1:50 **Presenter(s):** Valeria Cervantes and Jacquelyne Anton
 Faculty Mentor: Dr. Isabel Huacuja Alonso
 Department: History
 Title: *Airport Noise and the Politics of Sound in San Bernardino County*
- 2:10 **Presenter(s):** Marmar Zakher
 Faculty Mentor: Dr. Kate Liszka
 Department: History
 Title: *The Scribes of Kellis: Greek or Coptic?*
- 2:30 **Presenter(s):** Ciera Hammond
 Faculty Mentor: Dr. Meredith Conroy
 Department: Political Science
 Title: *The Psychology of Political Efficacy and its Unanticipated Effect on Youth Voter Turnout*

Session 12

Location: RM 218

Time: 1:30-2:25

College: Arts and Letters

Level: Undergraduate

- 1:30 **Presenter(s):** Leslie Rosales
 Faculty Mentor: N/A
 Department: Communications
 Title: *Ending Sexual Assault*
- 1:50 **Presenter(s):** Jasmine Colorado
 Faculty Mentor: Dr. Chad Luck
 Department: English
 Title: *Queen of Peace: Exploring the art behind the Virgin Mary of El Salvador*

California State University, San Bernardino

Office of Student Research

Location: Academic Research (AR 111)

Phone: (909) 537-3728

Email: osr@csusb.edu

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