CAL STATE LA

OFFICE OF RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES

26th Annual Student Symposium on Research, Scholarship, & Creative Activities

1st Overall Oral Presentation
Phi Kappa Phi – Travel Award
Joseph Lucey B.S. Civil Engineering *Modeling surface water inundation using NASA remote sensing data products* Faculty Mentor: Dr. Sonya Lopez

Cal State University, Los Angeles State Delegates for the

32nd CSU Student Research Competition

Campus Delegates
Behavioral and Social Sciences
Marianne Lacsamana M.S. Forensic Psychology *Social Support during Forensic Interviews with Children* Faculty Mentor: Dr. Mitchell Eisen
Arlene Sagastume *(Co-author: Christinalee Houseman)* M.A. Psychology *Cultural Values Conflicts and Gender-Related Experiences of Latina Young Adults* Faculty Mentor: Dr. Jessica Dennis
Stephanie Perez M.A. Interdisciplinary Studies

Restorative Justice for the Women of Sepur Zarco: From Testimonios to Reparations and Beyond Faculty Mentor: Dr. Dionne Espinoza
Carolina Santillán M.A. Latin American Studies *Rosario Ibarra and Politicized Mothering during Mexico's Dirty War* Faculty Mentor: Dr. Enrique Ochoa
Jennifer Jones B.A. Psychology, Minor Criminal Justice *The Relationship between Openness and Eyewitness Performance* Faculty Mentor: Dr. Mitchell Eisen
Creative Projects
Prasanna Nattuthurai, Maria Boldina, Tianyi Deng and Vrunda Shah M.S. Computer Information Systems *Developing an Internal Cryptocurrency system for Colleges* Faculty Mentor: Dr. Nanda Ganesan
Engineering and Computer Sciences
Joseph Lucey B.S. Civil Engineering *Modeling surface water inundation using NASA remote sensing data products* Faculty Mentor: Dr. Sonya Lopez
Jeovanny Reyes B.S. Electrical Engineering *Motion Learning Control for Robots with Differential Drive Systems* Faculty Mentor: Dr. He Shen
Physical and Mathematical Sciences
Kin Li

M.S. Mechanical Engineering *Fractional-Order System Identification (FOSI) is developed and applied to a number of analytical and experimental heat exchanger data.* Faculty Mentor: Dr. Arturo Pacheco-Vega
Kathryn Uchida B.S. Biochemistry *A Microfluidic Glucose Sensor Incorporating a Novel Thread-Based Electrode System* Faculty Mentor: Dr. Frank Gomez

The following students received an outstanding presentation award at the

26th Annual Student Symposium on Research, Scholarship, and Creative Activities

Oral Presentations

Behavioral and Social Sciences
Marianne Lacsamana M.S. Forensic Psychology *Social Support during Forensic Interviews with Children* Faculty Mentor: Dr. Mitchell Eisen
Jennifer Jones B.A. Psychology, Minor Criminal Justice *The Relationship between Openness and Eyewitness Performance* Faculty Mentor: Dr. Mitchell Eisen
Stephanie Perez M.A. Interdisciplinary Studies *Restorative Justice for the Women of Sepur Zarco: From Testimonios to Reparations and Beyond* Faculty Mentor: Dr. Dionne Espinoza
Alejandra Lemus

B.A. Latin American Studies

The Legacy of Central American Music as Testimonio

Faculty Mentor: Dr. Ericka Verba

Biological Sciences

Jacob Parres-Gold

B. S. Biochemistry

Detection of α-Syn-Induced Membrane Pore Formation via Transmembrane Current Sensing

Faculty Mentor: Dr. Yixian Wang

Roger Berton

M.S. Biological Science

Effects of Antimicrobial Peptides against Mycobacterium smegmatis

Faculty Mentor: Dr. Edith Porter

Jesus Medina

B.S. Biology

Diversity of bioluminescent signaling ostracod crustaceans in Puerto Rico coral reef habitats.

Faculty Mentor: Dr. Elizabeth Torres

Joel Ramirez

M.S. Kinesiology Option in Exercise Science

Feasibility and Effectiveness of using Electromyography to Track Physical Activity

Faculty Mentor: Dr. Christine Dy

Physical and Mathematical Sciences

Juan Leal Doblado

M.S. Physics

Modeling the effects of structural changes on the biomechanics and function of pancreatic and cardiac tissue

Faculty Mentor: Dr. Cecilia Zurita-Lopez and Dr. Andrea Armani

Kathryn Uchida

B.S. Biochemistry

A Microfluidic Glucose Sensor Incorporating a Novel Thread-Based Electrode System

Faculty Mentor: Dr. Frank Gomez

Creative Projects

Prasanna Nattuthurai, Maria Boldina, Tianyi Deng and Vrunda Shah

M.S. Computer Information Systems

Developing an Internal Cryptocurrency system for Colleges

Faculty Mentor: Dr. Nanda Ganesan

Education

Paula Garcia Rodriguez and Sofia Rogers

M.A. Communicative Disorders

Using questionnaires to screen multilingual children's current language abilities: Comparing parent reports across studies.

Faculty Mentors: Dr. Erica Ellis and Dr. Mary Kubalanza

Engineering and Computer Science

Joseph Lucey

B.S. Civil Engineering

Modeling surface water inundation using NASA remote sensing data products

Faculty Mentor: Dr. Sonya Lopez

Robin Sehler

M.S. Environmental Science

Assessing the Relationship between Soil Moisture and Precipitation Using Remote Sensing Information

Faculty Mentor: Dr. Jingjing Li

Kin Li

M.S. Mechanical Engineering

Applications of Non-Integer Derivatives in Engineering Systems

Faculty Mentor: Dr. Arturo Pacheco-Vega

Amit Pal

M.S. Electrical Engineering

Multimodal wearable sensing for a mobile fitness monitoring and exergaming system for individuals with spinal cord injury

Faculty Mentor: Dr. Deborah Won

Jeovanny Reyes

B.S. Electrical Engineering

Motion Learning Control for Robots with Differential Drive Systems

Faculty Mentor: Dr. He Shen

Physical and Mathematical Sciences II

Cynthia Ramirez, Manuel Davila and Gwen Ostergren

B.S. Applied Mathematics; B.S. Applied Mathematics; B.S. General Mathematics

The Chromatic Number of the Plane

Faculty Mentor: Dr. Michael Krebs

Jeannette Ramirez

M.S. Mathematics

Radio k-labeling for Graphs

Faculty Mentor: Dr. Daphne Liu

Samantha Burrola

B.S. Chemistry

An Optimized Microfluidic Paper-Based NiOOH/Zn Alkaline Battery

Faculty Mentor: Dr. Frank Gomez

Seth Linker

M.S. Physics

Measuring the Mechanical Quality Factors of Optical Coatings Deposited onto Silicon Nitride Membranes with the Goal of Increasing the Range and Sensitivity of Gravitational Wave Detectors

Faculty Mentor: Dr. Riccardo DeSalvo

The following students received an outstanding presentation award at the

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Poster Presentations

Behavioral and Social Sciences
Yvette Servin, Diane Martinez, and Rosemary Giron M.A. Sociology; B.A. Sociology; B.A. Sociology *Migrant Abuse & Rights along the Mexico-Guatemala Border* Faculty Mentor: Dr. Katie Dingeman
Angela Navata and Christinalee Houseman B.A. Psychology; M.A. Psychology *Examining the Use of the Asian American Values Scale for Filipino Americans* Faculty Mentor: Dr. Jessica Dennis
Biological Sciences I
Jessica Romero B.S. Biochemistry, Biophysics *Cytosine methylation and its effects on BI/BII equilibrium in DNA.* Faculty Mentor: Dr. Paul Nerenberg
Joshua Alvarado, Jessica Hsueh and Sarah Madira B.S. Biochemistry, B.S. Microbiology, B.S. Biochemistry *Generation of Leigh Syndrome Cell Models* Faculty Mentor: Dr. Nathan Lanning
Neil Poole B.S. Microbiology *Establishing Drosophila melanogaster as a model organism to study antimicrobial lipid function in the Innate Immune System* Faculty Mentors: Dr. Edith Porter and Dr. Edward Eivers

Biological Sciences II
Alexandra Garcia M.S. Biology *Battle of the sexes: Assessing sex-specific microhabitat associations in the Mojave Desert moss Syntrichia caninervis (Pottiaceae)* Faculty Mentor: Dr. Kirsten Fisher
Creative Activities
Sade Meeks M.S. Nutritional Science *The Development of a Cookbook Addressing Food Literacy Among the Food Insecure* Faculty Mentor: Dr. Kathryn Hillstrom
Engineering and Computer Science
James Velasco and Kevin Monsalvo B.S. Electrical Engineering *Wireless Sensor Networking in a Mobile App to Encourage and Facilitate Exercise for Individuals with Spinal Cord Injury* Faculty Mentor: Dr. Deborah Won
Isabel Escobar B.S. Civil Engineering Major *Pre- and Post-wildfire Hydrologic Calibration of Evaporative Fluxes using ParFlow-CLM* Faculty Mentor: Dr. Sonya Lopez
Kevin Chaput, Dongling Li, and Salla Kim B.S. Mechanical Engineering *Solar Steering: A Novel Approach for Satellite Attitude Control* Faculty Mentor: Dr. Ni Li
Health, Nutrition, and Clinical Sciences
Lisa Le M.S. Kinesiology

Feasibility and Effectiveness of Circuit Resistance Training Using Elastic Bands for Individuals With

Spinal Cord Injury

Faculty Mentor: Dr. Christine Dy

Physical and Mathematical Sciences

Elizabeth Metzler-Winslow

B.S. Mathematics General Option, Minor in Physics.

Refining Models of L1527-IRS

Faculty Mentor: Dr. Susan Terebey

Marcos Reyes

M.S. Mathematics

Kazhdan Constants Related to Isomorphic Cayley Graphs

Faculty Mentor: Dr. Michael Krebs

Brady Ross

M.A. Geography

Validation of surface temperature from Atmospheric Infrared Sounder Satellite over Barrow, Alaska

Faculty Mentor: Dr. Jingjing Li