



# CAL STATE LA

OFFICE OF RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITIES

## Annual Student Symposium on Research, Scholarship, & Creative Activities

### 1<sup>st</sup> Overall Oral Presentation

#### Phi Kappa Phi

#### India Wesley-Cardwell

B.S. Biological Sciences, Option in Microbiology

*Effect of TH 17 cytokines on the antimycobacterial activity of lung epithelial cell secretions*

Faculty Mentor: Dr. Edith Porter

### 2<sup>nd</sup> Overall Oral Presentation

#### Phi Kappa Phi

#### Farzana Yasmin Boby

M.S. Electrical Engineering

*Comparison of activity classification performance based on internal and external accelerometry for stimulation-based Parkinson's disease therapy*

Faculty Mentor: Dr. Deborah Won

### 3<sup>rd</sup> Overall Oral Presentation

#### Phi Kappa Phi

#### Kayci Hirakawa

B.A. Communication Disorder; Au.D. Audiology

*The Neuronal Measures of Auditory Processing in Speech Differentiation between English Monolinguals and Spanish-English Bilinguals*

Faculty Mentor: Dr. Miwako Hisagi

**Cal State University, Los Angeles State Delegates for the  
37<sup>th</sup> CSU Student Research Competition at San Diego State University campus on  
April 28-29, 2023**

### Campus Delegates

#### Behavioral and Social Sciences I

#### **Kayci Hirakawa**

B.A. Communication Disorders; Au.D. Audiology

*The Neuronal Measures of Auditory Processing in Speech Differentiation between English Monolinguals and Spanish-English Bilinguals*

Faculty Mentor: Dr. Miwako Hisagi

#### **Kimia Lavasani**

B.A. Psychology

*Exploring Jurors' Qualitative Verdict Justifications*

*Based on Jury Instructions*

Faculty Mentor: Dr. Alma Olaguez

## Behavioral and Social Sciences II

### **Elicet Cifuentes**

M.S. Kinesiology, Option I: Exercise Science

*Critical health education: Using a cultural lens to teach young Latina girls about body image*

Faculty Mentor: Dr. Saemi Lee

### **Juan Lindo**

M.S. Kinesiology

*"I'm Sorry You Feel That Way But That Wasn't My Intention": How to Apologize with Cultural Humility*

Faculty Mentors: Dr. Saemi Lee and Dr. George Crocker

## Humanities and Letters I

### **Katherine Lainez**

M.A. Latin American Studies

*The Erosion of Family Caused by 'Land Grabbing' in Honduras: Migration, Gendered Expectations, and those left-behind in Honduras.*

Faculty Mentor: Dr. Enrique Ochoa

## Humanities and Letters II

### **Hazel Carias-Urbina**

B.A. History, Minor in Latin American Studies

*Conspirando en Los Angeles: History of Central American Solidarity Organizing at MacArthur Park*

Faculty Mentor: Dr. Camille Suarez

## Engineering and Computer Sciences II

### **Farzana Yasmin Boby**

M.S. Electrical Engineering

*Comparison of activity classification performance based on internal and external accelerometry for stimulation-based Parkinson's disease therapy*

Faculty Mentor: Dr. Deborah Won

## Biological Sciences

### **India Wesley-Cardwell**

B.S. Biological Sciences, Option in Microbiology

Title: *Effect of TH 17 cytokines on the antimycobacterial activity of lung epithelial cell secretions*

Faculty Mentor: Dr. Edith Porter

### **Jin Hyeok Yoon**

M.S. Chemistry

*Regiochemistry of the Singlet Oxygen Ene Reaction in Metal-Organic Frameworks*

Faculty Mentors: Dr. Mathias Selke and Dr. Yangyang Liu

### **Harry Bevir**

M.S. Biological Sciences

*Dynamic localization of circadian clock proteins Rbp2 and KaiB in cyanobacteria*

Faculty Mentor: Dr. Susan Cohen

The following students received an outstanding presentation award at the  
**Student Symposium on Research, Scholarship, and Creative Activities**  
**Oral Presentations**

<b>Behavioral and Social Sciences I</b>
<p><b>Kimia Lavasani</b>            B.A. Psychology  <i>Exploring Jurors' Qualitative Verdict Justifications Based on Jury Instructions</i>            Faculty Mentor: Dr. Alma Olaguez</p>
<p><b>Teresa Virgen and Aundia Dianat</b>            M.S. Forensic Psychology  <i>Dynamics Between Defendant Race, Victim Race, and Racial Identity on Verdicts of Hispanic Mock Jurors</i>            Faculty Mentor: Dr. Mitchell Eisen</p>
<b>Behavioral and Social Sciences II</b>
<p><b>Brenda Romero</b>            B.S. Public Health  <i>Identifying the Impact of Covid-19 on Southeast Asian American Subgroups</i>            Faculty Mentors: Dr. Melanie Sabado-Liwag and Dr. Patchareeya Kwan</p>
<p><b>Elicet Cifuentes</b>            M.S. Kinesiology, Option I: Exercise Science  <i>Critical health education: Using a cultural lens to teach young Latina girls about body image</i>            Faculty Mentor: Dr. Saemi Lee</p>
<b>Humanities and Letters I</b>
<p><b>Katherine Lainez</b>            M.A. Latin American Studies  <i>The Erosion of Family Caused by 'Land Grabbing' in Honduras: Migration, Gendered Expectations, and those left-behind in Honduras.</i>            Faculty Mentor: Dr. Enrique Ochoa</p>
<b>Humanities and Letters II</b>
<p><b>Hazel Carias-Urbina</b>            B.A. History, Minor in Latin American Studies  <i>Conspirando en Los Angeles: History of Central American Solidarity Organizing at MacArthur Park</i>            Faculty Mentor: Dr. Camille Suarez</p>
<p><b>Robert Coronado, Jr.</b>            M.A. History  <i>Finding Rome in Michoacán: The Relación and the Spanish Renaissance in 16<sup>th</sup>-century New Spain</i>            Faculty Mentor: Dr. Manuel Aguilar-Moreno</p>
<b>Engineering and Computer Sciences I</b>
<p><b>Elizabeth Nunez</b>            B.S. Civil Engineering  <i>The Effect of Wildfires on the Properties of Clay – Civil Engineering Point of View</i>            Faculty Mentor: Dr. Wing Shun Kwan</p>

<p><b>Yousef Ajrab</b>  M.A. Materials Science and Engineering  <i>Evolution of the mechanical properties of biodegradable materials with respect to time and aspect ratio</i>  Faculty Mentor: Dr. Mathias Brieu</p>
<b>Engineering and Computer Sciences II</b>
<p><b>Harshil Kotamreddy</b>  B.S. Computer Science and Mathematics  <i>AI-based TSA Passenger Arrival Prediction</i>  Faculty Mentor: Dr. Jiang Guo</p>
<p><b>Farzana Yasmin Boby</b>  M.S. Electrical Engineering  <i>Comparison of activity classification performance based on internal and external accelerometry for stimulation-based Parkinson's disease therapy</i>  Faculty Mentor: Dr. Deborah Won</p>
<b>Biological Sciences</b>
<p><b>India Wesley-Cardwell</b>  B.S. Biological Sciences, Option in Microbiology  <i>Effect of TH 17 cytokines on the antimycobacterial activity of lung epithelial cell secretions</i>  Faculty Mentor: Dr. Edith Porter</p>
<p><b>Jin Hyeok Yoon</b>  M.S. Chemistry  <i>Regiochemistry of the Singlet Oxygen Ene Reaction in Metal-Organic Frameworks</i>  Faculty Mentors: Dr. Mathias Selke and Dr. Yangyang Liu</p>

The following students received an outstanding presentation award at the  
**Student Symposium on Research, Scholarship, and Creative Activities**  
Poster Presentations

<b>Behavioral and Social Sciences</b>
<p><b>Angela Shi</b>  B.S. Biological Sciences  <i>Levels of Grit, Self-Compassion, and Burnout in Nursing Students</i>  Faculty Mentors: Dr. Stacey A. Warner and Professor Anthony Carnevali</p>
<p><b>Ivan Cobian</b>  B.A. Psychology  <i>Sex Differences in Sexual Attitudes and Homonegativity among LGBTQ+ Adults</i>  Faculty Mentor: Dr. Heidi Riggio</p>
<p><b>Amber Pereira and Kazi Salsabil</b>  M.A. Psychology, B.A. Psychology  <i>Gender Differences in Factors Affecting Academic Persistence</i>  Faculty Mentor: Dr. Gaithri A. Fernando</p>

**Jiawei Xiang**

B.A. Psychology

*Less Pain with Darker Skin: Individual Racial Judgement on Social Pain Perception with Presenting Variation in Human Features*

Faculty Mentor: Dr. Austin Attaway

**Biological Sciences****Heidy Castellon**

M.S. Biology

*Iron acquisition: A possible target to treat hypervirulent Acinetobacter baumannii LAC-4*

Faculty Mentors: Dr. Howard Xu

**Vivian Pham**

B.S. Biology

*Reexamining Circumorbital Bones in Geckos*

Faculty Mentor: Dr. Raul Diaz, Jr.

**Bryan Garcia**

M.S. Biology

*Phenotypic characterization of an Acinetobacter baumannii LAC-4 mutant with the deletion of the heme oxygenase gene cluster (HOC)*

Faculty Mentor: Dr. Howard Xu

**Cindy Nguyen and Shanti Raminani**

B.S. Biochemistry

*Investigating the Effects of Thermolysis on the Purification of Recombinant Antifreeze Proteins*

Faculty Mentor: Dr. Xin Wen

**Engineering and Computer Science****Janice Nguyen**

M.S. Electrical and Computer Engineering

*A Classification Model for Facial Landmark Tracking to Determine Sentence Types for American Sign Language Recognition*

Faculty Mentor: Dr. Y. Curtis Wang

**Catalina Lee**

M.S. Mechanical Engineering

*Design of Truss Structures Made of Linear Elastic Materials for Hyperelastic Anisotropic Applications*

Faculty Mentor: Dr. Mathias Brieu

**Matthew Engquist and Amir Shakibi**

M.S. Materials Science

*Microstructural Analysis of Laser-Wire Direct Energy Deposition 316L Stainless Steel*

Faculty Mentor: Dr. Moshen Eshraghi

**Isaac Aldape Torres**

M.S. Mechanical Engineering

*Optimization of a Redox Flow Battery Power Cell for Clean Energy Storage*

Faculty Mentor: Dr. John Christopher Bachman

**Deep M. Bhatka, Roger Roldan and Anayely M. Saguilan**

B.S. Computer Science; B.S. Mechanical Engineering; M.S. Mechanical Engineering  
*Toward Experimental Dynamics and Fuzzy Control of an Inverted Pendulum – Cart System*  
Faculty Mentors: Dr. Arturo Pacheco-Vega and Dr. Gustavo B. Menezes

**Health, Nutrition, and Clinical Sciences**

**Sydney Tan**

B.S. Nutritional Science  
*The Relationship Between Self-efficacy and Engagement in Healthy Behaviors Among Los Angeles Community Members Living with Chronic Conditions – A Qualitative Study*  
Faculty Mentor: Dr. Kathryn Hillstrom

**Physical and Mathematical Sciences**

**Arianna Camarena**

M.S. Geological Sciences Environmental Hydrogeology  
*Groundwater Imprint on the Hydrochemistry of the Upper Los Angeles River above Sepulveda Basin*  
Faculty Mentor: Dr. Barry Hibbs

**Juliann Panehal**

M.S. Physics & Astronomy  
*The Inner Workings of a Protostar: A Chemical View of the Disk and Envelope of L1527*  
Faculty Mentor: Dr. Susan Terebey