

# 30<sup>th</sup> Student Symposium on Research, Scholarship, & Creative Activities

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

#### Phi Kappa Phi

## **Monique Swaby**

M.S. in Forensic Psychology

Differences in Racial Identity Predict Same-Race Leniency in Mock Jurors

Faculty Mentor: Dr. Mitchell Eisen

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

# Phi Kappa Phi

# Nouneh Boodaghian

M.S. Biological Sciences

Investigating the roles for essential genes in the regulation of the circadian clock in Synechococcus elongatus using CRISPR interference
Faculty Mentor: Dr. Susan E. Cohen

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

# Phi Kappa Phi

## Genesis Barzallo, Hung Gieng, and Estella Luu

B.S. Biochemistry and B.S. Chemistry

Quantitative Analysis of Olefins in Petroleum Fractions by Comprehensive Two-Dimensional Gas Chromatography

Faculty Mentor: Dr. Petr Vozka

Cal State University, Los Angeles State Delegates for the 36<sup>th</sup> CSU Student Research Competition at San Francisco State University campus on April 29-30, 2022

#### **Campus Delegates**

#### **Behavioral and Social Sciences**

#### **Monique Swaby**

M.S. in Forensic Psychology

Differences in Racial Identity Predict Same-Race Leniency in Mock Jurors

Faculty Mentor: Dr. Mitchell Eisen

#### **Michael Baum**

M.A. Psychology

Religiosity Predicts Negative Personality Attributes: Links with Dogmatism, Social Dominance

Orientation, and Right-Wing Authoritarianism

Faculty Mentor: Dr. Heidi Riggio

## **Biological Sciences**

#### **Nouneh Boodaghian**

M.S. Biological Sciences

Investigating the roles for essential genes in the regulation of the circadian clock in Synechococcus elongatus using CRISPR interference

Faculty Mentor: Dr. Susan E. Cohen

#### **Stephanie Varghese**

**B.S. Biological Sciences** 

Drought and warming shift primary production in grasslands disproportionately by plant species Faculty Mentors: Maggie Anderson (UMN), Dr. Amber Churchill (UMN), and Dr. Alexandra Wright (CSULA)

# **Engineering and Computer Sciences**

#### Nikita O. Mishra

B.S. Biochemistry, Minor in Bioinformatics & Computational Biology

Computational characterizations of binding affinity in SARS-CoV-2 variants to the human ACE2 receptor

Faculty Mentor: Dr. Negin Forouzesh

#### **Humanities and Letters**

#### Michelle Carballo

M.A. Latin American Studies

An early modern American story: Is there only one way to be a winner?

Faculty Mentor: Dr. Kittiya Lee

#### **Hazel Carias-Urbina**

B.A. History, Minor in Latin American Studies

Parade para el pueblo: Community Collaboration in the COFECA Independence Day Parade and

**Festival** 

Faculty Mentor: Dr. Camille Suarez

## **Physical and Mathematical Sciences I**

#### Genesis Barzallo, Hung Gieng, and Estella Luu

B.S. Biochemistry and B.S. Chemistry

Quantitative Analysis of Olefins in Petroleum Fractions by Comprehensive Two-Dimensional Gas Chromatography

Faculty Mentor: Dr. Petr Vozka

#### Alisa Quon and Anna Nguyen

B.S. Biochemistry; B.S. Biochemistry

Porphyrinic Metal-Organic Frameworks for the Photocatalytic Detoxification of a Mustard Gas

Simulant via Selective Oxidation Faculty Mentor: Dr. Yangyang Liu

#### **Physical and Mathematical Sciences II**

#### Vincente Lossada

M.S. Mathematics

Phase Transition in the Erdos-Renyi Random Graph

Faculty Mentor: Dr. Daphne Liu

# The following students received an outstanding presentation award at the

# 30<sup>th</sup> Student Symposium on Research, Scholarship, and Creative Activities Oral Presentations

#### **Behavioral and Social Sciences**

#### **Monique Swaby**

M.S. in Forensic Psychology

Differences in Racial Identity Predict Same-Race Leniency in Mock Jurors

Faculty Mentor: Dr. Mitchell Eisen

#### **Audrey Zhang**

B.A. Psychology

Effects of Therapeutic Versus Popular Music on College Students' Stress Levels

Faculty Mentor: Dr. Senqi Hu

# **Biological Sciences**

### **Nouneh Boodaghian**

M.S. Biological Sciences

Investigating the roles for essential genes in the regulation of the circadian clock in Synechococcus elongatus using CRISPR interference

Faculty Mentor: Dr. Susan E. Cohen

#### **Stephanie Varghese**

**B.S. Biological Sciences** 

Drought and warming shift primary production in grasslands disproportionately by plant species Faculty Mentors: Maggie Anderson (UMN), Dr. Amber Churchill (UMN), and Dr. Alexandra Wright (CSULA)

#### **Engineering and Computer Sciences**

# **Andrew Barajas**

M.S. Physics

Determining The Mass Of A ClassO/I Protostar L1527 Using Moment Maps

Faculty Mentor: Dr. Susan Terebey

#### Nikita O. Mishra

B.S. Biochemistry, Minor in Bioinformatics & Computational Biology

Computational characterizations of binding affinity in SARS-CoV-2 variants to the human ACE2 receptor Faculty Mentor: Dr. Negin Forouzesh

## **Humanities and Letters**

#### Michelle Carballo

M.A. Latin American Studies

An early modern American story: Is there only one way to be a winner?

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Parade para el pueblo: Community Collaboration in the COFECA Independence Day Parade and Festival

Faculty Mentor: Dr. Camille Suarez

## **Physical and Mathematical Sciences I**

## **Daniel Lopez**

M.S. Mechanical Engineering

Fuzzy Logic Control in a Heat Convection Loop Faculty Mentor: Dr. Arturo Pacheco-Vega

## Alisa Quon and Anna Nguyen

B.S. Biochemistry; B.S. Biochemistry

Porphyrinic Metal-Organic Frameworks for the Photocatalytic Detoxification of a Mustard Gas

Simulant via Selective Oxidation Faculty Mentor: Dr. Yangyang Liu

# **Physical and Mathematical Sciences II**

#### **Vincente Lossada**

M.S. Mathematics

Phase Transition in the Erdos-Renyi Random Graph

Faculty Mentor: Dr. Daphne Liu

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# 30<sup>th</sup> Student Symposium on Research, Scholarship, and Creative Activities \*Poster Presentations\*

#### **Behavioral and Social Sciences**

#### **Lily Tran**

Master of Public Health

Assessing High School Students' Knowledge and Attitudes Towards Sex Education

Faculty Mentors: Dr. Melanie Sabado-Liwag and Dr. Kimberly Kisler Pisca

#### Villy Basuki

M.S. Healthcare Management

Psychotherapy: Its Efficacy for ADHD Treatment in Children and Adolescents

Faculty Mentor: Dr. Mengying He

#### **Emeline Beltran**

M.A. Communication Studies

Painting, Prevention, and Promotion: How Art Can Teach Public Health to Elementary Schools

Faculty Mentor: Dr. Angela Cooke-Jackson

#### **Biological Sciences**

Patricia Sandoval, Octavio Zaragoza-Rodriguez, Salvador Guerra, James Arazia, Shantal Flores, Nelson Henriquez, Ojaswini Suryavanshi, Y. Curtis Wang, and Michael Selvan Joseph

M.S. Kinesiology, Option in Exercise Science

*Identification of the optimal training paradigm to facilitate recovery in spinal cord contused animals*Faculty Mentor: Dr. Michael Selvan Joseph

## **Engineering and Computer Science**

#### **David Gonzalez**

B.S. Electrical Engineering

A Cascaded Optimal Linear Filter Estimation of Energy Expenditure

Faculty Mentor: Deborah Won

#### **Physical and Mathematical Sciences**

#### Jin Hyeok Yoon and Raymond Lo

M.S. Chemistry; B.S. Chemistry

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

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

#### **Howard Dong**

B.S. Applied Mathematics

Anti-magic labeling of trees

Faculty Mentor: Dr. Daphne Liu