



# STUDENT RESEARCH CENTER

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## SACRAMENTO STATE

### Student Research & Creative Activity Spring Symposium

Monday, March 9<sup>th</sup>, 2020

## Congratulations to the 2020 Spring Symposium Awardees!

### Session 1: Arts & Letters

1<sup>st</sup> place awardee: **Jennifer Shaver**

Queer Community in Christian Churches

Graduate, Humanities

Mentor: Harvey Stark, Ph.D

2<sup>nd</sup> place awardee: **Kelly Cullity**

Moral Internationalism Versus Patriotic Isolationism: An Ideological Analysis of America's Debate on the League of Nations

Graduate, History

Mentor: Mona Siegel, Ph.D

### Session 2: Engineering & Computer Science

1<sup>st</sup> place awardee: **Rachael Dal Porto**

The use of Rhodamine WT for the characterization of hydraulic residence times in wetlands

Undergraduate, Civil Engineering

Mentor: Cristina Poindexter, Ph.D

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2<sup>nd</sup> place awardee: **Christopher Morairty**

Optimization of Aerodynamics via Incorporation of Mechatronics

Graduate, Mechanical Engineering

Mentor: Rustin Vogt, Ph.D

### **Session 3: Health & Human Services**

1<sup>st</sup> place awardee: **Valeria Gonzalez**

Preliminary Evaluation of the Suitability of Spanish-Language Hearing Aid User Guides

Undergraduate, Communication Sciences & Disorders

Mentor: Laura Gaeta, Ph.D

2<sup>nd</sup> place awardee: **Patrick Dorsey**

Reckless in the Pursuit of Fortune and Glory? The Characteristics of California's Uninsured Young Invincibles and a Strategic Approach to Increasing Health Insurance Enrollment

Graduate, Public Policy & Administration

Mentor: Robert Wassmer, Ph.D

### **Session 4: Social Sciences & Interdisciplinary Studies**

1<sup>st</sup> place awardee: **Heather Fletcher**

We Built It, but Do Students Know What It Is? Student Perceptions of a Programmatic Undergraduate Research Experience

Graduate, Biological Sciences

Mentor: Kelly McDonald, Ph.D

2<sup>nd</sup> place awardee: **Bailey Rowe**

Student Perceptions of Research Authenticity in Introductory, Intermediate and Advanced Biology Laboratory Courses

Graduate, Biological Sciences

Mentor: Kelly McDonald, Ph.D

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### Session 5: Biological Sciences

1<sup>st</sup> place awardees: **Lillian Murphy, Alex Ceballos, Daniel Chu, Kaitlin Danziger, Jomari Gabriel, and Chloe Welch**

Exposure to Hydroxylated Polybrominated Diphenyl Ethers (PBDEs)  
Impairs Axon Pathfinding in Wild Type *Drosophila*

Undergraduate, Biological Sciences

Mentor: Kimberly Mulligan, Ph.D

2<sup>nd</sup> place awardees: (tied for 2<sup>nd</sup> place)

#### **Ethan Roberts**

Burrows created by an ecosystem engineer improve survivorship of intertidal invertebrates

Undergraduate, Biological Sciences

Mentor: Timothy Davidson, Ph.D

#### **Leigh Sanders**

Phylogeny of Central American Heroine Cichlid Fishes

Undergraduate, Biological Sciences

Mentor: Ron Coleman, Ph.D

#### **Ayesha Shabbir**

Optimization of reversion assay to elucidate gene amplification mutations in *Acinetobacter baylyi*

Undergraduate, Biological Sciences

Mentor: Andrew Reams, Ph.D

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### Session 6: Biological Sciences

1<sup>st</sup> place awardees: **Chloe Welch, Brendan Tinsley, Yomira Palacios, Alex Ceballos, Jacqueline Stein, and Daniel Chu**

Bisphenol-A Exposure Differentially Impairs Neurodevelopmental Phenotypes in Wild Type *Drosophila* and in a *Drosophila* model of Fragile X Syndrome

Graduate, Biological Sciences

Mentor: Kimberly Mulligan, Ph.D

2<sup>nd</sup> place awardee: **Nathalie Mendoza**

A quantitative study of cranial shape in a rat model for Down syndrome

Undergraduate, Anthropology

Mentor: Nandini Singh, Ph.D

### Session 7: Business Administration

No awardee.

### Session 8: Education

1<sup>st</sup> place awardee: **Meredith Galloway**

The Policies of Promise: What Policy Variables Impact Outcomes Equity for California Community College Students?

Graduate, Educational Leadership Doctorate

Mentor: Robert Wassmer, Ph.D

2<sup>nd</sup> place awardee: **Kendra Duncan**

Female STEM Role Model Curriculum Impact on Middle School Students

Graduate, Education

Mentor: Sherrie Carinci, Ed.D and Corinne Lardy, Ph.D

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## Session 9: Physical Sciences & Mathematics

1<sup>st</sup> place awardee: **Anthony Perez**

Synthesis of Non-Native Oligomeric Sugars for Biomedical Applications

Undergraduate, Chemistry

Mentor: Katherine McReynolds, Ph.D

2<sup>nd</sup> place awardees: (tied for 2<sup>nd</sup> place)

**Brandon Thomas**

Modeling Electron Capture in Simulated 3-D Semiconductor Detector

Undergraduate, Physics & Astronomy

Mentor: Matt Block, Ph.D and Josh Moss, Ph.D

**Herminio Carrillo**

Off Axis Short Gamma-Ray Bursts and Their Afterglow Properties

Undergraduate, Physics & Astronomy

Mentor: Rodolfo Barniol Duran, Ph.D

The End