



SACRAMENTO STATE
STUDENT
RESEARCH
CENTER

2019 Student Research & Creative Activity Spring Symposium Winners!

University Union, Sacramento State March 4, 2019

Category 1: Engineering, Science & Math

2nd Place Undergraduate Winner:

Emergency Services Interoperability

Diehl, Cory

Undergraduate, Electrical and Electronic Engineering

Mentor: Russ Tatro, PhD

1st Place Undergraduate Winner:

Coloring the Integers: Pseudo Progressions and Ramsey Theory

Throckmorton, Morgan

Undergraduate, Mathematics

Mentor: Jay Cummings, PhD

1st Place Graduate Winner:

Carbon Sequestration in a Microalgae Photobioreactor

Hagen, Timothy

Graduate, Mechanical Engineering

Mentor: Farshid Zabihian, PhD

Category 2: Arts & Letters

2nd Place Undergraduate Winner:

Spolia from the Templo Mayor and the Processes of Spanish Colonialism

Casey, Belinda

Undergraduate, Art History

Mentor: Rachel Miller, PhD

1st Place Undergraduate Winner:

The Creation of an Impreza: The Symbolic Link Between Lorenzo de' Medici and the Florentine Giraffe

Roseberry, Merrill

Undergraduate, Art

Mentor: Rachel Miller, PhD

1st Place Graduate Winner:

Rewriting Experiences of Trauma: Narrative Fragmentation and the Imagined Nation in Kamila Shamsie's *Kartography*

Thomas, Ashley

Graduate, English

Mentor: Torsa Ghosal, PhD

Category 3: Health & Human Services

1st Place Graduate Winner:

THERAPEUTIC INTERVENTION FOR A 3-YEAR-OLD GIRL WITH CASK
GENETIC DISORDER

McCandless, Cathryn

Graduate, Physical Therapy

Mentor: Katrin Mattern-Baxter, PhD

Category 4: Education, Social Sciences & Interdisciplinary Studies

2nd Place Undergraduate Winner:

A Longitudinal Investigation of Personality as a Predictor of
Vigorous Exercise Using a Two-Part Mixed-Effects Model

Sanchez, Vanessa with Meghan Snipes

Undergraduate, Psychology

Mentor: Melissa McTernan, PhD

1st Place Undergraduate Winner:

Companion planting as an understory restoration strategy along
the American River

Mir, Moiz

Undergraduate, Environmental Studies

Mentor: Michelle Stevens, PhD

1st Place Graduate Winner:

Oh, The Places You'll Go!: Power and Public Restrooms

Bruffett, Deborah

Graduate, Anthropology

Mentor: Michael Walker, PhD

Category 5: Biological Sciences

2nd Place Undergraduate Winner:

The Autism-Associated Chromatin Modifier, *Chromodomain Helicase DNA Binding Protein 8/kismet*, Affects Axon Guidance and Behavioral Phenotypes in *Drosophila melanogaster*

Welch, Chloe

Undergraduate, Biological Sciences

Mentor: Kimberly Mulligan, PhD

1st Place Undergraduate Winner:

It's not the heat, it's the humidity: burrow microhabitats created by a boring crustacean ameliorate stressful conditions in the intertidal

Roberts, Ethan

Undergraduate, Biological Sciences

Mentor: Timothy Davidson, PhD

2nd Place Graduate Winner:

Analysis of Pre-Sequencing Methodologies for Determining
Bacterial Species and Relative Abundance in Gut and Skin
Microbiome Communities

Truong, Catalina

Graduate, Biological Sciences

Mentor: Robert Crawford, PhD

1st Place Graduate Winner:

Determining if Bisphenol A Confers Risk of Autism using
Drosophila melanogaster as a Model

Tinsley, Brendan

Graduate, Biological Sciences

Mentor: Kimberly Mulligan, PhD

Below is a list of 10 students who will be representing Sacramento State at the 33rd CSU Research Competition taking place on April 26-27 at California State University, Fullerton:

Morgan Throckmorton – Mathematics
Timothy Hagen – Mechanical Engineering
Merrill Roseberry – Art
Ashley Thomas – English
Cathryn McCandless – Physical Therapy
Moiz Mir – Environmental Studies
Deborah Bruffett – Anthropology
Chloe Welch – Biology
Ethan Roberts – Biology
Brendan Tinsley – Biology