



**CALIFORNIA STATE
UNIVERSITY, LONG BEACH**

**34th ANNUAL STUDENT
RESEARCH
COMPETITION**

Showcasing excellence in scholarly
research, and highlighting creative
activity

Friday, March 11, 2022 | 9am-1:15pm

Held In-Person



Room Overview

Please go to your designated room in the College of Business (COB) or the Horn Center. Rooms are separated by discipline. Please refer to the CSULB Map at the end of the program.

Room: COB 110: Engineering & Computer Science

Room: COB 122: Behavioral & Social Sciences

Room: COB 123: Behavioral & Social Sciences

Room: COB 124: Health, Nutrition, and Clinical Sciences

Room: Horn Center 120: Physical & Mathematical Sciences

Room: COB 217: Education

Room: COB 218: Humanities & Letters

Room: Horn Center 120: Biological & Agricultural Sciences

Room: COB-110

Friday, March 11, 2022

Engineering and Computer Science

10:55AM-11:15AM

Jack Hanson, *Chemical Engineering*
Faculty Sponsor: Sara Moghtadernejad
Title: Droplet Impact on a Spinning Disk

11:15AM-11:35AM

Babak Taherian, *Engineering and Applied Mathematics*
Faculty Sponsor: Praveen Shankar
Title: Stability Analysis of a Double Inverted Pendulum
Subjected to a Tilted Oscillatory Force

11:35AM-11:55AM

Zachary Johnson, *Chemical Engineering*
Faculty Sponsor: Sara Moghtadernejad
Title: Droplet Shedding and Coalescence Under the Presence of
Shear Flow

11:55AM-12:15PM

Kunaal Sarhaya, *Biomedical Engineering*
Contributor: Cory Arnold
Faculty Sponsor: Kelly Ga-Young Suh
Title: Patient-Specific 3D Printed Models for Determining Ideal
Procedure to Treat Carotid Arterial Disease

12:15PM-12:35PM

Ravi Monani, *Electrical Engineering*
Contributor: Brian Rogers
Faculty Sponsor: Ava Hedayatipour
Title: CMOS Based Encryption Architecture on FPGA Using
Chaos Implementation for Secure Communication

12:35PM-12:55PM

Ryan Cavanagh, *Computer Science*
Faculty Sponsor: Jelena Trajkovic
Title: ARMS: Autonomous Robotic Manipulation in Space-
Simulation Environment

12:55PM-1:15PM

Jorge Cortes, *Biomedical Engineering*
Contributor: Alara Blofield
Faculty Sponsor: Kelly Ga-Young Suh
Title: Development of a Novel Series Left Ventricular Assist
Device (LVAD)

Room: COB-122

Friday, March 11, 2022

Behavioral and Social Sciences

9:15AM-9:35AM

Jesse Ramirez, *Social Work*

Faculty Sponsor: Kristina Lovato

Title: Building the Capacity of Child Welfare Systems to Serve Immigrant Families during COVID-19

9:35AM-9:55AM

Tiffany Ho, *Psychology*

Faculty Sponsor: Yada Treesukosol

Title: Sex Differences in Taste Quality of Ethanol

9:55AM-10:15AM

Elizabeth Franco, *Psychology*

Faculty Sponsor: William Bill Pedersen

Title: Not in control and mad about it! Collective narcissism mediates the effect of personal control on state anger for out-group targets

10:15AM-10:35AM

Briana Franco, *Psychology*

Faculty Sponsor: William Bill Pedersen

Title: It hurts to be alone: Social exclusion and the influence of group size, social pain, and social distress on state anger

10:35AM-10:55AM

Julia Maclaren, *Psychology*

Contributor: Catherine Smith

Faculty Sponsor: Courtney Ahrens

Title: How Faculty Self-Disclosure and Approachability Relate to Student Self-Disclosure of Personal Information to Faculty Members: A Systematic Scoping Review

10:55AM-11:15AM

Yeng Vue, *Psychology*

Faculty Sponsor: William Pedersen

Title: Topsy Tit for Tat: Revenge Planning Moderates the Effect of Alcohol Priming on Triggered Displaced Aggression

11:15AM-11:35AM

Paul Didham, *Applied Statistics*

Faculty Sponsor: Jonathan Phan

Title: An Exploration of Personality, Subjective Well-being, and Behaviors in the Nomological Network of Trait Boredom: A Meta-Analysis

Room: COB-122

Friday, March 11, 2022

Behavioral and Social Sciences

11:35AM-11:55AM

Nhi Tran, *Linguistics*

Faculty Sponsor: Itxaso Rodriguez

Title: Style Shift and Vietnamese L2 English Learners

11:55AM-12:15PM

Aleece Hanson, *Political Science*

Faculty Sponsor: Matt Lesenyie

Title: Attitudes about Extreme Temperatures in Prisons and Prison Labor

12:15PM-12:35PM

Darius Garrino, *Anthropology*

Faculty Sponsor: Itxaso Rodriguez

Title: Control, Style, and Attentional Load: Production of /u/-/ʊ/ and /i/-/ɪ/ with a Spanish-English Bilingual

12:35PM-12:55PM

Marc Barcelos, *Psychology*

Faculty Sponsor: Yada Treesukosol

Title: The Role of Genes Involved in Hedonic Reward Signaling During Ethanol Consumption in Male and Female Rats

12:55PM-1:15AM

Alexis Diaz, *Biology*

Faculty Sponsor: Raisa Hernandez Pacheco

Title: Modeling Socially Driven Health Inequalities in a Nonhuman Primate

Room: COB-123

Friday, March 11, 2022

Behavioral and Social Sciences

9:55AM-10:15AM

Kevin Rivera, *History*

Faculty Sponsor: Hector Neff

Title: Following Wolfgang Haberland Back to Los Angeles

10:15AM-10:35AM

Victoria Davis, *Public Health*

Faculty Sponsor: Amber Johnson

Title: Black Women Experiencing: Examining Emotional and Physical Experiences of Black Women in 2020

10:35AM-10:55AM

Sienna Sanchez, *Sociology*

Faculty Sponsor: Kerry Woodward

Title: Sororities: Performing Gender and Perpetuating Race and Class Privilege

10:55AM-11:15AM

Jomara Madrigal Reyes, *Linguistics*

Faculty Sponsor: Itxaso Rodriguez

Title: Vowel Changes in Freestyle Rap

11:15AM-11:35AM

Jeremy Bohol, *Speech-Language Pathology*

Faculty Sponsor: Itxaso Rodriguez

Title: Analyzing the Adoption of Californian English: How does Attention to Speech Impact Bilingual Speakers?

11:35AM-11:55AM

Diana Than, *Psychology*

Faculty Sponsor: Courtney Ahrens

Title: Ethnic Differences in IPV Survivors' Use of Restraining Orders

11:55AM-12:15PM

Anayeli Hernandez, *International Studies*

Contributor: Lauren Lakritz

Faculty Sponsor: Caitlin Fouratt

Title: The Impact of COVID-19 on Asylum Seekers in Costa Rica

Room: COB-123

Friday, March 11, 2022

Behavioral and Social Sciences

12:15PM-12:35PM

Janine Vuong, *Speech-Language Pathology*

Faculty Sponsor: Itxaso Rodriguez

Title: Non-Rhoticity and the Australian English Diphthong /əʊ/ in Relation to Audience and Lexical Frequency

12:35PM-12:55PM

Katherine Palaeologus, *Anthropology*

Faculty Sponsor: Hector Neff

Title: Intentional Cranial Deformation on Ometepe Island

12:55PM-1:15PM

Cayce Schaeffer, *Psychology*

Faculty Sponsor: Matt Lesenyie

Title: Discrimination as a Barrier to Psychiatric Access: An Audit Study

Room: COB-124

Friday, March 11, 2022

Health, Nutrition, and Clinical Sciences

9:15AM-9:35AM

Corey Tanaka, *Kinesiology*

Faculty Sponsor: Kevin Valenzuela

Title: Effects of Footwear on the 1-Repetition Maximum Deadlift

9:35AM-9:55AM

Joshua Murillo, *MAPR*

Faculty Sponsor: Guido Urizar

Title: The Effects of Racism on Levels of Stress in Fathers: Role of Coping and Sense of Control

9:55AM-10:15AM

Andrea Luna, *Master of Public Health*

Faculty Sponsor: Melawhy Garcia

Title: Association Between Hispanic/Latino Parents Confidence in Providing the Recommended Servings for Fruits and Vegetables and the Actual Intake of Fruits and Vegetables Among their Children

10:15AM-10:35AM

Gerson Leon Cruz, *Health Science: Community Health Education*

Faculty Sponsor: Melawhy Garcia

Title: Association Between Hispanic/Latino Parents Confidence in Providing the Recommended Servings for Fruits and Vegetables and the Actual Intake of Fruits and Vegetables Among their Children.

10:35AM-10:55AM

Jessica Lim, *Molecular Biology*

Faculty Sponsor: Pei-Fang Hung

Title: Comparing and Contrasting Frontotemporal Dementia and Primary Progressive Aphasia

10:55AM-11:15AM

Makena Pollon, *Applied Mathematics*

Faculty Sponsor: Erlyana Erlyana

Title: The Significance of Nationwide COVID-19 Pandemic Data and Individual Factors During the Alpha Variant on Depressive and Anxiety Symptoms in the U.S. Adult Population.

Room: Horn Center-120

Friday, March 11, 2022

Physical and Mathematical Sciences

9:15AM-9:35AM

Danna De Boer, *Chemistry*

Faculty Sponsor: Eric Sorin

Title: Binding Modes of Butyrylcholinesterase-Specific Organophosphate Inhibitors from Massive All-atom Simulations

9:35AM-9:55AM

Spencer Halls, *Applied Physics*

Faculty Sponsor: Jiyeong Gu

Title: Fabrication and Characterization of An Exchange Spring Coupled Micropillar Josephson Junction

9:55AM-10:15AM

Nicholas Lozano, *Physics*

Faculty Sponsor: Prashanth Jaikumar

Title: Temperature Effects on the Asteroseismology of Neutron Stars

Room: COB-217

Friday, March 11, 2022

Education

9:15AM-9:35AM

Graham Lockett, *Educational Leadership*

Faculty Sponsor: Nina Flores

Title: LGBTQ+ Studies in High School...A Not-So-Queer Idea

9:35AM-9:55AM

Cassandra Jones, *Educational Technology/Media Leadership; Teacher Liberian Credential*

Faculty Sponsor: Lesley Farmer

Title: Teacher Perceptions of News Literacy

9:55AM-10:15AM

Lindsay Sterk, *Educational Leadership*

Faculty Sponsor: Avery Olson

Title: Socialization Experiences of First-Generation Master's Graduate Students

10:15AM-10:35AM

Eva Dotti, *Educational Leadership*

Faculty Sponsor: Alejandra Priede

Title: Understanding Student Financial Hardship: Examining the Relationships Among Student Success Factors, Race/Ethnicity, and Low-Income Status

10:35AM-10:55AM

Ashleigh Dimpflmaier, *School Counseling*

Faculty Sponsor: Jacob Olsen

Title: Focus on Prevention: Bullying and Social Emotional Learning

10:55AM-11:15AM

Luis Mendiola Luna, *Environmental Science & Policy*

Faculty Sponsor: Norma Salcedo

Title: Developing Hybrid UndocuAlly Training Models to Support Undocumented Student Success

Room: COB-218

Friday, March 11, 2022

Humanities and Letters

9:15AM-9:35AM

Yahui Chen, *Philosophy*

Faculty Sponsor: Marie Jayasekera

Title: Lecture

9:35AM-9:55AM

Rachel Livinal, *Journalism*

Faculty Sponsor: Madeleine Liseblad

Title: A Historical Analysis: All Things Considered's Transformative Measures to Stay Relevant

9:55AM-10:15AM

Pedro Rapallo Zubillaga, *Philosophy*

Faculty Sponsor: Max Rosenkrantz

Title: Impossibly Immoral Fictions and How to Understand Them

10:15AM-10:35AM

Ning Shao, *Philosophy*

Faculty Sponsor: Cory Wright

Title: Two Conceptions of Color

10:35AM-10:55AM

Vaishalee Chaudhary, *Political Science*

Faculty Sponsor: Kimberly Walters

Title: Postcolonial Development of Jury Trials - The Spread of Common Law Across the Globe

10:55AM-11:15AM

Raley Zurcher, *Philosophy*

Faculty Sponsor: Cory Wright

Title: Defending Adverbialism Against the Temporal and Many Properties Problem

Room: Horn Center-120

Friday, March 11, 2022

Biological and Agricultural Sciences

10:15AM-10:35AM

Stephanie Gonzalez, *Quantitative Ecology*

Faculty Sponsor: Raisa Hernández Pacheco

Title: Adverse experiences early in life influence the lifespan of a nonhuman primate

10:35AM-10:55AM

Matt Acosta, *Microbiology*

Faculty Sponsor: Peter Ramirez

Title: Assessing interactions between HIV-1 Nef and the host factor annexin A2

10:55AM-11:15AM

Vanessa Lopez, *Biology*

Faculty Sponsor: Yuan Yu Lee

Title: Novel Interactions of Bisphenol A on Receptor for Advanced Glycation End-Products by Molecular Snapshot

11:15AM-11:35AM

Emily Muilenburg, *Microbiology*

Faculty Sponsor: Yuan Yu Lee

Title: Systemic View of Species-specific Antagonist Binding of Bisphenol A on Androgen Receptor

11:35AM-11:55AM

Anita Arenas, *Biological Science*

Faculty Sponsor: Christine Whitcraft

Title: Decomposition Rate of *Iris pseudacorus* in a Southern California Estuary

11:55AM-12:15PM

Ayoola Fadonougbo, *Biomedical Engineering*

Faculty Sponsor: Jason Schwans

Title: The Computational Modeling of Potential Single and Multi-Domain Glycoside Hydrolases for the Degradation of Polysaccharides in Biofuel Technology

Room: Horn Center-120

Friday, March 11, 2022

Biological and Agricultural Sciences

12:15PM-12:35PM

Karel Aceituno, *Biochemistry*

Faculty Sponsor: Eric Sorin

Title: FMOC Leucine Butyrylcholinesterase Inhibitors

12:35PM-12:55PM

Aida Husain, *Biochemistry M.S.*

Faculty Sponsor: Deepali Bhandari

Title: Understanding the mechanism underlying SC66-mediated cell death

12:55PM-1:15PM

Emma Siegfried, *Biology*

Faculty Sponsor: Darren Johnson

Title: Effects of Ocean Acidification and Food Availability on Mortality Rates of California Grunion (*Leuresthes tenuis*)



Special Thanks

Committee

Elyzza Aparicio, Ammarah Bashir, Jody Cormack, Mae DeBruin, Mitchell Fruto, Penelope Gaibor, Juliette Hidalgo, Simon Kim, Ammisha Opoku-Boamah, Meliana Prado, Michelle Ramirez, Bryan Rodriguez, Saron Shiferaw, Sergio Temores

Partners

Academic Affairs, Graduate Center, Office of the Provost, Office of Research and Economic Development, Office of Undergraduate Research Services, Undergraduate Research Opportunity Program, VP of Graduate Studies

Moderators

Jordie Conde, Leslie Delgado, Kiarra Garcia Tom Ho, Omar Hussein, Andie Niederecker, Demetrius Tien, Tanner Whitlow

Jurors

Juror names are not revealed, they are sent a special thanks and signed certificate from Associate Vice President of Research and Sponsored Programs Dr. Simon Kim

A B C D E F G H



LEGEND

- Building
- CSULB Campus Shuttle Stop
- Long Beach Transit Bus Stop
- Metro Stop
- Parking Pay Station
- University Police
- Amazon @ The Beach

PARKING

- Student/General Parking
- Short-Term Parking
- Resident Parking
- Employee/Restricted Parking
- Lot 10A Permit Parking
- 15-Min Loading Zone
- Motorcycle Parking