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: Tipsy 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
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

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

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 /əʉ/ 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

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

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

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