CALIFORNIA STATE UNIVERSITY,
LONG BEACH

36th ANNUAL STUDENT RESEARCH COMPETITION

Showcasing excellence in scholarly research, and highlighting creative activity

Friday, March 8, 2024 | 9 am - 1:35 pm
Held In-Person

Room Overview

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

COB 110: Engineering & Computer Science

COB 111: Behavioral & Social Sciences

COB 112: Behavioral & Social Sciences

COB 113: Health, Nutrition, and Clinical Sciences

COB 114: Physical & Mathematical Sciences

COB 122: Education

COB 123: Humanities & Letters

COB 124: Biological & Agricultural Sciences

COB 218: Creative Arts & Design

LIB 201: Awards Ceremony (3:30pm-4:30pm)

Room: COB-110 **Friday, March 8, 2024**
Engineering and Computer Science

9:15AM-9:35AM	**Thomas Nguyen,** *Computer Science* Faculty Sponsor: Hossein Sayadi Title: Exploring the Role of Generative AI in Computer Science and Engineering Education: Challenges and Opportunities
9:35AM-9:55AM	**Zhangying He,** *Applied Mathematics* Faculty Sponsor: Hossein Sayadi Title: When AI Meets Hardware Cybersecurity: Securing Biomedical Devices via Machine Learning Defense
9:55AM-10:15AM	**Anurang Balakrishnan**, *Computer Science* Co-Presenter: Satyam Pathak Faculty Sponsor: Tairan Liu Title: Addressing Urban Traffic Congestion: A Hybrid DQN-Autoencoder Model with HyperOPT Tuning
10:15AM-10:35AM	**Jack Brubaker**, *Chemical Engineering* Faculty Sponsor: Sara Moghtadernejad Title: An Introduction to Powder Rheology in Pharmaceuticals
10:35AM-10:55AM	**Satyam Sharman,** *Computer Science* Faculty Sponsor: Muhammad Bashit Title: Using Deep Reinforcement Learning and Formal Verification in Safety Critical Systems: Strategies and Challenges
10:55AM-11:15AM	**BREAK**

Room: COB-110 **Friday, March 8, 2024**
Engineering and Computer Science

11:15AM-11:35AM	**Haley Obenshain,** *Biomedical Engineering* Co-Presenter: Bryant Lopez Faculty Sponsor: Siavash Ahrar Title: Hydrodynamic investigations of sand dollar larva
11:35AM-11:55AM	**Jalen Leyretana,** *Biomedical Engineering* Co-Presenter: Alex Alonzo Faculty Sponsor: Ga-Young Suh Title: Computational Workflow to Design Patient-Specific Inferior Vena Cava (IVC) Filter
11:55AM-12:15PM	**Charanya Rao,** *Electrical Engineering* Faculty Sponsor: Ava Hedayatipour Title: Inductorless CMOS Security Architecture for Implantable and Wearable Devices
12:15PM-12:35PM	**Lithika Bangalre Rajesh,** *Electrical Engineering* Faculty Sponsor: Ava Hedayatipour Title: Development of Power-Efficient SAR ADC for Enduring Biomedical Appliances
12:35PM-12:55PM	**Jonathan Dabu,** *Computer Engineering – Computer Science* Faculty Sponsor: Muhammad Abdul Basit Ur Rahim Title: Enhancing Model Integrity and Fairness: Leveraging Knowledge Graphs in Preprocessing

Room: COB-111 **Friday, March 8, 2024**
Behavioral and Social Sciences

9:15AM-9:35AM	**Jacob Nguyen,** *Psychology* Faculty Sponsor: Guido Urizar Title: Prenatal Depression and Relational Satisfaction on Maternal-Fetal Attachment
9:35AM-9:55AM	**Brooke Diaz,** *Child Development and Family Studies* Faculty Sponsor: Sandra Arevalo Title: Associations between Threatening and Non-Threatening Adverse Childhood Experiences and Psychological Wellbeing: A Gender-Based Analysis
9:55AM-10:15AM	**Brian Gonzalez,** *Sport, Exercise, and Performance Psychology* Faculty Sponsor: Alison Ede Title: An examination of self-compassion, goal orientation, and competitive anxiety among collegiate soccer athletes
10:15AM-10:35AM	**Darren Leung,** *Biology* Faculty Sponsor: Houng-Wei Tsai Title: Deciphering the Role of Androgen Receptor in the Masculinization of Social Behavior in Mice
10:35AM-10:55AM	**Alina Tran,** *Psychology* Faculty Sponsor: David Illingworth Title: Medical Diagnosis Game - Risk
10:55AM-11:15AM	**Ellen Tatevosyan,** *Psychological Research* Faculty Sponsor: Guido Urizar Title: Factors of Postpartum Depression
11:15AM-11:35AM	**BREAK**

Room: COB-111 **Friday, March 8, 2024**
Behavioral and Social Sciences

11:35AM-11:55AM	**Melina De La Rosa,** *Economic and International Studies* Faculty Sponsor: Graham Odell Title: The Democratic Stability of Post-Developmental States
11:55AM-12:15PM	**Hannah Sjogren,** *Social Work* Faculty Sponsor: Jo Brocato Title: Coping and Resilience Among First-Year University Students at California State University Long Beach
12:15PM-12:35PM	**Maya Shankar,** *Psychological Research* Faculty Sponsor: Bill Pedersen Title: Low in control, high in anger: The impact of personal control, anger, and group membership on aggressive inclinations
12:35PM-12:55PM	**Francisco Hernandez,** *Psychological Research* Faculty Sponsor: Bill Pedersen Title: Towards a brighter future: Temporal priming moderates the effect of trait psychopathy on ostracism and aggression
12:55PM-1:15PM	**Sarah Arya,** *Political Science* Faculty Sponsor: Ezgi Yidiz Title: Issues Matter: Selective Restrains at the European Court of Human Rights
1:15PM-1:35PM	**Raha Esmaeilpour,** *Social Work* Faculty Sponsor: Jo Brocato Title: Women's Perceptions of How Sexual Trauma Impacts Intimate Bonds in Recovery

Room: COB-112 **Friday, March 8, 2024**
Behavioral and Social Sciences

9:15AM-9:35AM	**Emma Gerch,** *Social Work* Faculty Sponsor: Mimi Kim Title: Project Evaluation of a Restorative Justice Program
9:35AM-9:55AM	**Ambar Hernandez,** *Psychological Research* Faculty Sponsor: Araceli Gonzalez Title: Major Barriers to Seeking Mental Health Services in College Students
9:55AM-10:15AM	**Sofia Uribe,** *Psychology* Faculty Sponsor: Bill Pedersen Title: Driving under the influence of alcohol priming: Alcohol priming moderates the effect of aggressive driving
10:15AM-10:35AM	**Liz Grimes***, Public Health* Faculty Sponsor: Niloofar Bavarian Title: Examining Firearm Buyback Program Participation Within the Context of Health Belief
10:35AM-10:55AM	**Emily Doffing***, Psychological Research* Co-Presenter: Kevin T. Tran Faculty Sponsor: Danielle Kohfeldt Title: #EndoWarriors: Chronically Pained Webcomic Fans with Endometriosis Collectively Coping and Resisting
10:55AM-11:15AM	**Haylie Prochnow,** *Criminology and Criminal Justice* Faculty Sponsor: Ernest Chavez Title: Reforming or Rebranding? The California Model of Incarceration
11:15AM-11:35AM	**BREA**

Room: COB-110 **Friday, March 8, 2024**
Behavioral and Social Sciences

11:35AM-11:55AM	**Angel Marin-Flores**, *Anthropology* Faculty Sponsor: Hector Neff Title: Arqueologia del Campo Volcanico Nejapa, 2023-2024
11:55AM-12:15PM	**Elizabeth Esquivel**, *Social Work* Faculty Sponsor: Molly Ranney Title: Bereavement Needs of Incarcerated Adults
12:15 PM-12:35PM	**Rita Butrus,** *Psychology/Philosophy* Faculty Sponsor: May Ling Halim Title: Socialization Messages About the Comparative Value of Men and Women among Middle Eastern Families
12:35 PM-12:55PM	**Maerie Grayce Morales,** *Social Work* Faculty Sponsor: Jason Plummer Title: Defund, Abolish, or Reform: MSW Perceptions of Policy Reform
12:55PM-1:15PM	**David Pastor, Jr.,** *Social Work* Faculty Sponsor: Ronald Loewe Title: Esta Es Mi Tierra, Así Es Mi Per*ú*: Documenting Gastronationalism Through Food Communities in Los Angeles, California
1:15PM-1:35PM	**Danielle Phan,** *Psychology* Faculty Sponsor: Kimberly Kelly Title: The Role of Parent-child Conversations in Child Emotion Learning During Informal Science

Room: COB-113 **Friday, March 8, 2024**
Health, Nutrition, and Clinical Sciences

9:15AM-9:35AM	**Ruby Barragan,** *Psychology* Faculty Sponsor: Guido Urizar Title: Investigating the effects of perinatal depression on postpartum depression by sex hormones
9:35AM-9:55AM	**Victoria Min,** *Health Science: Community Health Education* Faculty Sponsor: Virginia Gray Title: Motivators of Caffeine Use in College Students
9:55AM-10:15AM	**Audrey Stallings,** *Women's, Gender, and Sexuality Studies* Faculty Sponsor: Sarah Taylor Title: Reproductive Coercion: Prevalence and Risk Factors Related to Relationship Health

Room: COB-114 **Friday, March 8, 2024**
Physical and Mathematical Sciences

9:15AM-9:35AM

Anais Johnson, *Biochemistry*
Faculty Sponsor: Young-Seok Shon
Title: Synthesis of Hydroxy-terminated Alkanethiolate-capped Pd nanoclusters for green catalysts in environmentally benign organic solvents

9:35AM-9:55AM

Chi Vo, *Computer Science*
Faculty Sponsor: Laurie Hunning
Title: Toward Drought Propagation: Characterizing Meteorological Drought in North America

9:55AM-10:15AM

Hector Gaxiola Williams, *Mathematics*
Faculty: Sponsor: Kathryn McCormick
Title: Maps Between Operator Algebras

Room: COB-122 **Friday, March 8, 2024**
Education

9:15AM-9:35AM	**Alyssa Reamer,** *Liberal Studies* Faculty Sponsor: Antonio Martinez Title: Ungrading: Students Perceptions as Learners and Educators
9:35AM-9:55AM	**Leela Salary,** *Education* Faculty Sponsor: Kimberly Kelly Title: High Impact Practices: Inequities in Experiences for College Students of Color at a Minority-Serving Institution
9:55AM-10:15AM	**Claudine Maloles,** *Early Childhood Education* Faculty Sponsor: Kimberly Kelly Title: High Impact Practices: Barriers to Participation for College Students of Color at a Minority-Serving Institution
10:15AM-10:35AM	**Jaclyn Caballero,** *Education Leadership* Faculty Sponsor: Devery Rodgers Title: Post-pandemic edtech preparedness: A comparative analysis of public school districts' education technology plans
10:35AM-10:55AM	**Manami Koizumi,** *Counseling, Student Development in Higher Education* Faculty Sponsor: Paul Ratanasiripong Title: Intergroup Dialogue, Self-Authorship, Diversity-Seeking, and Anti-Asian Prejudice Beliefs among College Students
10:55AM-11:15AM	**David Ifediba,** *Education* Faculty Sponsor: Kerri Knight-Teague Title: Examining African American Student's Educational Outcomes through an Economic and Environmental Outlook
11:15AM-11:35AM	**Florencia Galcan Godinez,** *Counseling, Student Development in Higher Education* Faculty Sponsor: Paul Ratanasiripong Title: Mentoring First-Generation Transfer Students for College Students

Room: COB-123 **Friday, March 8, 2024**
Humanities and Letters

9:15AM-9:35AM	**Emma Teano,** *History* Faculty Sponsor: Guotong Li Title: Crusader Medicine
9:35AM-9:55AM	**Cody Spjut,** *Philosophy* Faculty Sponsor: Max Rosenkrantz Title: Unraveling Self-Predication in Plato's Dialogues
9:55AM-10:15AM	**Jason Rosencrantz,** *Philosophy* Faculty Sponsor: Cory Wright Title: Escaping Effability
10:15AM-10:35AM	**Frank Mendoza,** Faculty Sponsor: Cory Wright Title: The Case for Teletransportation Abstinence: Just Say No!
10:35AM-10:55AM	**Raya Torres,** *Journalism* Faculty Sponsor: Jesus Ayala Title: Reporting from Uvalde: A Survey of Long-term Stress Responses to Covering a Mass Shooting
10:55AM-11:15AM	**BREAK**

Room: COB-123 **Friday, March 8, 2024**
Humanities and Letters

11:15AM-11:35AM

Travis Barnett, *Philosophy*
Faculty Sponsor: Cory Wright
Title: Huntington's Disease: A Sickness not unto Death

11:35AM-11:55PM

Trevor Keenan, *International Studies*
Faculty Sponsor: Caitlin Fouratt
Title: Drought and Disparities in Spain

11:55AM-12:15PM

Thomas Mendoza, *History*
Faculty Sponsor: Donna Binkiewicz
Title: Slavery Under Three Flags: The Evolution of Native American Slavery in California

12:15PM-12:35PM

El Nicklin, *Philosophy*
Faculty Sponsor: Marie Jayasekera
Title: Making Sense of Lockean Reflection

12:35PM-12:55PM

Jack Haslett, *Journalism*
Faculty Sponsor: Madeleine Liseblad
Title: The Enduring Legacy and Resilient Drive of Wendell Smith

12:55PM-1:15PM

Liz Hanna, *Journalism*
Faculty Sponsor: Madeleine Liseblad
Title: The Legacy of Helen Gurley Brown

Room: COB-124 **Friday, March 8, 2024**
Biological and Agricultural Sciences

9:15AM-9:35AM	**Bryan Kang,** *Molecular Cell Biology and Physiology* Faculty Sponsor: Paul Weers Title: Determination of the Quaternary Structure of Human Apolipoprotein A-I at Physiologically Relevant Concentrations
9:35AM-9:55AM	**BREAK**
9:55AM-10:15AM	**Ariana Lee,** *Biological Sciences* Faculty Sponsor: Douglas Pace Title: Change for a dollar? Sand dollar larvae maintain food-induced plasticity throughout development
10:15AM-10:35AM	**Kiana Tran,** *Molecular Cell Biology and Physiology* Faculty Sponsor: YuanYu Lee Title: Molecular Docking Analysis of Novel Interactions between Bisphenol A and Insulin Receptor
10:35AM-10:55PM	**Vidya Metkar,** *Biochemistry* Faculty Sponsor: Vasanthy Narayanaswami Title: Development of Nanodiscs with Apolipoprotein E3 for Enzyme Replacement Therapy of acid sphingomyelinase for the Treatment of Niemann-Pick Disease

Room: COB-218 **Friday, March 8, 2024**
Creative Arts & Design

9:15AM-9:35AM

Wynn Barnard, *Studio Art: Illustration/Animation Track*
Faculty Sponsor: Soyeon Kim
Title: Across the DMZ visual development

9:35AM-9:55PM

Elizabeth Doll, *Marketing*
Faculty Sponsor: Jennifer Richardson
Title: How Theatre Teaches Men Emotional Vulnerability

Special Thanks

Committee

Natasha Amanda, Elyzza Aparicio, Miranda Bates, Jody Cormack, Mae DeBruin, Emily Doffing, Penelope Gaibor, Andee Gonzalez, Carlos Guijarro, Alan Hoang, Simon Kim, Mehily Mandal, Pauline Menchavez, Jackie Morales, Zahra Muthalip, Tanya Nguyen, Ammisha Opoku-Boamah, Ellyssa Paik, Michelle Phan, Dina Perrone

Partners

Academic Affairs, Graduate Center, Office of the Provost, Office of Research and Economic Development (ORED), Office of Undergraduate Research Services (OURS), Undergraduate Research Opportunity Program (UROP)

Moderators

Natasha Amanda, Carlos Carmona, Pauline Menchavez, Jackie Morales, Ammisha Opoku-Boamah, Ellyssa Paik, Cecilia Paredes, Smit Patel, Louis Santos, Noppo Sirikul

Jurors

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

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BELLFLOWER BOULEVARD
EARL WARREN DRIVE
MERRIAM WAY
PALO VERDE AVENUE
DEUKMEJIAN WAY
BEACH DRIVE
BROTMAN DRIVE
PYRAMID PARKING STRUCTURE
WEST CAMPUS DRIVE
EAST CAMPUS DRIVE
SOUTH CAMPUS DRIVE
SEVENTH STREET
STATE UNIVERSITY DRIVE
MAIN ENTRANCE
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PYR
DC
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UMC
PALO VERDE NORTH PARKING STRUCTURE
PALO VERDE SOUTH PARKING STRUCTURE
SSCH
BAC
Baseball Field
Softball Field
George H. Allen Field
Tennis Courts
Track & Field
SRWC
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REPR
UP
E4
POOLS
EN3
EN4
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CORP
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ED2
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 Praking