

California State University

Long Beach

Presents



31st Annual

Student Research

Competition

FNU Abdul Ahad Khan

Title: Using Latent Heat of Phase Change Materials to Modify Transient Heating of Evaporating Drops

Faculty Sponsor: Navdeep Dhillon

Discipline: Engineering and Computer Science

Joshua Acosta

Title: The Enlightenment and the Question of Rights:

Women in the French Revolution, 1789-1793

Faculty Sponsor: Guotong Li

Discipline: Humanities and Letters

Jack Aldrich

Contributors: Savannah M. Roussel, Melissa Yang, Stephanie M. Araiza

Title: Separation of Methane and Carbon Dioxide using
hybrid ZIF-95/Zeolite Material

Faculty Sponsor: Fangyuan Tian

Discipline: Physical and Mathematical Sciences

Leslie Alvarez

Contributor: Michael Drake

Title: 3D Printed Molds for Flexible Composite Armor

Faculty Sponsor: Daniel Whisler

Discipline: Engineering and Computer Science

Avery Amerson

Title: Wittgenstein, Extended Cognition, and the Problem of Other Minds

Faculty Sponsor: Cory Wright

Discipline: Humanities and Letters

Hailey Arreola

Contributor: Hanna MacNew

Title: Do The Use of Tablets Lead to More Information Being Recorded and
Better Accuracy in Short-Term Memory Tasks

Faculty Sponsor: Kim-Phuong Vu

Discipline: Behavioral and Social Sciences

Adriana Barroso

Title: A Future Teacher's Experience of Mathematical Research

Faculty Sponsor: Jeffrey Pair

Discipline: Education

Megan Barry

Title: G-mode Oscillations in Neutron Stars

Faculty Sponsor: Prashanth Jaikumar

Discipline: Physical and Mathematical Sciences

Chloe Bell Wilson

Title: The Life and Times of a Landmark: The “Big Mound” in Print in
St. Louis, Missouri During the Nineteenth Century

Faculty Sponsor: Patricia Cleary

Discipline: Humanities and Letters

Parker Bremer

Title: Assessing Protein-Ligand Binding Modes via
Ensemble Molecular Dynamics

Faculty Sponsor: Eric Sorin

Discipline: Physical and Mathematical Sciences

Yohanna Brown

Contributor: Chyann J. Richard

Title: The Role of Glucagon Like Peptide 1 Receptors on the Rewarding
Effects of Oxycodone in Male and Female Adolescent Rats

Faculty Sponsor: Arturo Zavala

Discipline: Behavioral and Social Sciences

Abbey Brown

Title: Effectiveness of 14-week Undulating Exercise Program on Lipid
Profile in Postmenopausal Females

Faculty Sponsor: Jan Schroeder

Discipline: Health, Nutrition, and Clinical Sciences

Alanna Carnahan

Title: The Native Feminist Gesture: A Case Study in Contemporary Praxis

Faculty Sponsor: Nizan Shaked

Discipline: Humanities and Letters

Bridget Cervelli

Title: Do Peer Groups in Higher Education Aid Formerly Incarcerated
Women with Identity Repair?

Faculty Sponsor: Kerry Woodward

Discipline: Behavioral and Social Sciences

Alyssa Clevestine

Title: Residency of the Protected Giant Sea Bass (*Stereolepis Gigas*) to New and
Historic Aggregation Sites at Santa Catalina Island, CA

Faculty Sponsor: Christopher Lowe

Discipline: Biological and Agricultural Sciences

Blake Dimas

Title: Adorno and the Potentials of Pop

Faculty Sponsor: Mary Caputi

Discipline: Humanities and Letters

Keelin Dunn

Title: The Effects of Gender Role Strain on Self-Compassion Among Men:

A Qualitative Analysis

Faculty Sponsor: Varisa Patraporn

Discipline: Behavioral and Social Sciences

Julissa Duran

Contributor: Dereck Benavides

Title: The Impact of an HIV Testing Campaign Telenovela Miniseries on Shame

and Stigma Among Latinos

Faculty Sponsor: Gino Galvez

Discipline: Behavioral and Social Sciences

Dustin Durke

Title: Biomechanics and Energetics of Curved Treadmills

Faculty Sponsor: Kellie Walters

Discipline: Health, Nutrition, and Clinical Sciences

Cameron Duval

Title: Corpus Analysis of Profanity on Reddit and its Subreddits

Faculty Sponsor: Nancy Hall

Discipline: Humanities and Letters

Daniela Franco

Contributor: Jennifer Zamudio

Title: Early-life Ketamine Administration Reverses the Aversive Properties of Ethanol in Adolescent Male, but Not Adolescent Female Rats

Faculty Sponsor: Arturo Zavala

Discipline: Behavioral and Social Sciences

Taina Gariglio Dias

Title: A Metric for Shark Dorsal Fins Based on Boundary Descriptor Matching

Faculty Sponsor: Ju Cheol Moon

Discipline: Engineering and Computer Science

Olga Gonzalez

Title: The Complexities of Music and Culture: Latin and American Love –Viking Metal Fanbase Beyond the Nordic World

Faculty Sponsor: Ray Briggs

Discipline: Humanities and Letters

Lauren Hamilton

Title: Deciphering the Past

Faculty Sponsor: Marie Kelleher

Discipline: Humanities and Letters

Will Hinckley

Title: Deciphering the Molecular Connection between Flowering Time and Age-Dependent Leaf Senescence in Arabidopsis Thaliana

Faculty Sponsor: Judy Brusslan

Discipline: Biological and Agricultural Sciences

Roxy Hurtado

Title: The Rhetoric of The Marvelous Mrs. Maisel

Faculty Sponsor: Jennifer Asenas

Discipline: Humanities and Letters

Bryen Irving

Contributor: Marc Salinas

Title: Identifying Hybrid Stars with Relativistic Tidal Deformations

Faculty Sponsor: Thomas Klaehn

Discipline: Physical and Mathematical Sciences

Arihant Jain

Title: Rendering Effective Fitness App for Older Adults

Faculty Sponsor: Bo Fu

Discipline: Engineering and Computer Science

Jared Jetter

Title: Nitrogen-Doped Graphene Catalyst Simulation with Density Functional Theory

Faculty Sponsor: Ted Yu

Discipline: Engineering and Computer Science

Selina Jimenez

Title: What Makes Women Stay: Exploring Relational Satisfaction and Infidelity

Faculty Sponsor: Ebony Utley

Discipline: Behavioral and Social Sciences

Christiana Koch

Title: How the Social Model of Autism Expands Autistic Students' College Major Choices

Faculty Sponsor: Varisa Patraporn

Discipline: Behavioral and Social Sciences

Cammie Lam

Contributors: Wilma Figueroa, Kyle Yomogida

Title: Prescription Stimulant Diversion on a College Campus:

Interpersonal and Environmental Correlates

Faculty Sponsor: Niloofar Bavarian

Discipline: Health, Nutrition, and Clinical Sciences

Christopher Laplante

Title: Do Idealizations have Epistemic Value?

Faculty Sponsor: Cory Wright

Discipline: Interdisciplinary

Allison Leas

Title: From Passive Racism to White Supremacy: The Range of Sympathetic

Twitter Responses to Charlottesville's Unite the Right Rally

Faculty Sponsor: Kerry Woodward

Discipline: Behavioral and Social Sciences

Dylan Logas

Title: Paving East Los Angeles: Building the Freeway System
in East Los Angeles, 1940-1970

Faculty Sponsor: Margaret Kuo

Discipline: Humanities and Letters

Alexis Lopez

Title: Leveling Out the Playing Field: A Conceptualization of Remittance Behavior
for Nepali Women Migrant Workers

Faculty Sponsor: Barbara Grossman-Thompson

Discipline: Behavioral and Social Sciences

Phillippe Ly

Contributors: Train Tran, Codi Pace

Title: Rapid Enantiomer Ratio Determination of P-Chiral Compounds with Eu(hfc)₃

Faculty Sponsor: Kensaku Nakayama

Discipline: Physical and Mathematical Sciences

Bethany Lycan

Title: Vowel Length in Pahka'anil

Faculty Sponsor: Michael Ahland

Discipline: Behavioral and Social Sciences

Megan Maguire

Title: Evidence-Based Psychotherapeutic Treatment for Victims of Intimate Partner Violence:
An Investigation of the Relationship between Patient Presenting Characteristics and Treatment

Faculty Sponsor: Bitu Ghafoori

Discipline: Behavioral and Social Sciences

Abhishek Manjulagodu Basavanna

Title: Effect of High Electric Fields on the Thermal-Fluid Behavior of Impacting Drops

Faculty Sponsor: Navdeep Dhillon

Discipline: Engineering and Computer Science

Alexandra Mazza

Contributor: Victoria Cimo

Title: Brain Stimulation and Focus Attention Effects on Motor Control:

Do We Get an Additive Effect on Kinetics and Performance

Faculty Sponsor: Kevin Valenzuela

Discipline: Health, Nutrition, and Clinical Sciences

Mo Mohan Kumar

Title: Decoding NIMBY Discourse: Permanent Supportive Housing in Orange County

Faculty Sponsor: Kerry Woodward

Discipline: Behavioral and Social Sciences

Jennifer Montepeque Diaz

Title: Cebolla Que Hace Llorar, da Sabor a la Comida:

Promoting College Enrollment for Latinas with Disabilities

Faculty Sponsor: Kristin Powers

Discipline: Education

Nhi Nguyen

Title: Not an American Dream:

First-Generation Vietnamese Females' Success in Higher Education

Faculty Sponsor: Nina Flores

Discipline: Education

Anh Nguyen

Title: Structurally Induced Magnetic Phase Transition

Faculty Sponsor: Thomas Gredig

Discipline: Physical and Mathematical Sciences

Odalis Perez Anleu

Title: Gender Specific Latinx Labor Niches: Male Truck Drivers

Faculty Sponsor: Claudia Lopez

Discipline: Behavioral and Social Sciences

Leon Phung

Contributors: Jun Cao, Andrew Thomson, Rodrigo Garcia, Bryan Melara, Marcos Rodriguez

Title: Study of Competing Fracture Mechanisms in Metal Matrix Composites

Faculty Sponsor: Yan Li

Discipline: Engineering and Computer Science

Jonelle Prideaux

Contributor: Sabina Rodriguez

Title: Moral Alignment and the Representation of Minorities in the Comic Arts

Faculty Sponsor: Christopher Warren

Discipline: Behavioral and Social Sciences

Jessica Pugel

Title: Novel Intersectional Methodology for Social Psychological Research:

A Framework and Demonstration

Faculty Sponsor: Bradley Pan-Weisz

Discipline: Behavioral and Social Sciences

Samantha Quiroz

Title: C1q Increases 25-hydroxycholesterol in Macrophages During Atherosclerosis

Faculty Sponsor: Deborah Fraser

Discipline: Biological and Agricultural Sciences

Eunice Reed

Title: Patient Engagement and Empowerment: Have Electronic Records Moved
the Needle for the Chronically Ill Patients?

Faculty Sponsor: Sandhya Shimoga

Discipline: Health, Nutrition, and Clinical Sciences

Adriana Rincon

Title: A Morphology and Magnetism Study of Permalloy Nano-cap Magnetic Film

Faculty Sponsor: Chuhee Kwon

Discipline: Physical and Mathematical Sciences

Irabel Romero

Contributor: Matthew Winger

Title: Spatiotemporal Establishment of Growing Bacterial

Faculty Sponsor: Paul Sun

Discipline: Interdisciplinary

Juan Rosas

Title: Latinx Identities: Race, Space, and Language

Faculty Sponsor: Malcolm Finney

Discipline: Behavioral and Social Sciences

Diana Sanchez

Title: Gender Inequality in California Business Positions

Faculty Sponsor: Elaine Frey

Discipline: Business, Economics, and Public Administration

Juan Sigala

Title: Reducing Regrets Through a Goal Setting Intervention in Crew Athletics

Faculty Sponsor: Leilani Madrigal

Discipline: Behavioral and Social Sciences

Olivia Silke

Title: The Effects of Maternal Mindful Disposition on Maternal and Infant

Stress Levels During Pregnancy and Postpartum

Faculty Sponsor: Guido Urizar

Discipline: Behavioral and Social Sciences

Cham Roeun Sok

Contributors: Reamreaksmey Chum, Lin Da Sov

Title: Study Abroad Agencies: The Case for Return on Investment

Faculty Sponsor: Laura Gonzalez

Discipline: Business, Economics, and Public Administration

Bo Sortman

Contributors: Daniela Franco, Eric Nunez, Cynthia Moreno-Barriga

Title: Early Adolescent Rats Exhibit Adult-Typical Sensitization

Faculty Sponsor: Arturo Zavala

Discipline: Behavioral and Social Sciences

Subramaniam Seshadri

Title: Predicting Mental State of Social Media Users

Faculty Sponsor: Roman Tankelevich

Discipline: Engineering and Computer Science

Subramaniam Seshadri

Title: Predicting Mental State of Social Media Users

Faculty Sponsor: Roman Tankelevich

Discipline: Engineering and Computer Science

Brenda Villafana

Contributors: Brenda Villafana, Alexandra Gutierrez, Scott Lee

Title: Effects of Dual Task and Impaired Vision with Perturbations in Young Adults: A Pilot Study

Faculty Sponsor: Vennila Krishnan

Discipline: Interdisciplinary

Anna-Diana von Haumer

Title: Resilience Among Syrian Refugees

Faculty Sponsor: Bitu Ghafoori

Discipline: Behavioral and Social Sciences

Darielle Watkins

Title: Baywatch or First Responders? Diving into Trauma and Gender Inequality Experienced by Ocean Lifeguards

Faculty Sponsor: Leilani Madrigal

Discipline: Behavioral and Social Sciences

Kristen Way

Title: Source Protection Areas: Possible Causes for Establishment

Faculty Sponsor: Elaine Frey

Discipline: Business, Economics, and Public Administration

Kandis Williams

Title: The Lived Experiences of Latinx Communities in South Central
Los Angeles in the Age Of Trump

Faculty Sponsor: Claudia Lopez

Discipline: Behavioral and Social Sciences

Matthew Winger

Contributor: Irabel Romero

Title: Spatiotemporal Establishment of Growing Bacterial Colonies

Faculty Sponsor: Paul Sun

Discipline: Interdisciplinary

Special thanks to our committee, partners, moderators and jurors!

Committee

Atun Cawker, Jody Cormack, Mae DeBruin, Juliette Hidalgo, Kerry Johnson, Simon Kim, Rachel Lauf, Angela Locks, Melissa Mahoney, Meliana Prado, Michelle Ramirez, Bryan Rodriguez, Jamina Russell, Jenny Solorzano, Sergio Temores, JaQuea Willis

Partners

Academic Affairs, Graduate Student Resources Center, Office of the Provost, Office of Research and Sponsored Programs, Office of Undergraduate Research Services, Undergraduate Research Opportunity Program, VP of Graduate Studies

Moderators

Jonah Deocariza, Madiha Farrukh, Kylie Foster, Rachel Haering, Kim Hong Keu, Aaron Leal, Ramon Perez, Dylan Sakamoto, Jao San Agustin, Jen Schwartz, Rachel Veale

Jurors

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