

September 22, 2022

CSUPERB is pleased to announce the 2022 Faculty-Graduate Student Research Collaboration Program awards. CSUPERB is making 34 awards totaling \$334,544.89 to CSU faculty-graduate student teams at 17 CSU campuses.

(CSUPERB) aims to support faculty-graduate student research collaborations across the California State University (CSU) system affected by the COVID-19 pandemic.

Awardees of the Faculty-Graduate Student Research Collaboration Program are supported by up to a total of \$10,000 for student salary and of which \$2,500 can be used for supplies, equipment and services to support the faculty mentor's laboratory.

The 2022 Faculty-Graduate Student Research Collaboration Program awardees are (in alphabetical order):

1. **Dana Abou Abbas** (Biological Sciences, California State University, Los Angeles)
Award: \$10000 for the proposal titled "Exploiting the Epithelial Cell – TH17 Axis for Novel Vaccine Design."
Mentor: Edith Porter
2. **Gabriela Acevedo Munares** (Biomedical Engineering, San José State University)
Award: \$10000 for the proposal titled "Establishing a Platform to Elucidate the Adhesome of Endothelial Cell Attachment, Proliferation, and Migration."
Mentor: Patrick Journey
3. **Andres Cuellar** (Chemistry and Biochemistry, California State University, Fullerton)
Award: \$10000 for the proposal titled "Role of Phosphorylation in the Linker 2 Region of Polypyrimidine Tract Binding Protein 2."
Mentor: Niroshika Keppetipola
4. **Justin Davis** (Chemistry and Biochemistry, California State University, Northridge)
Award: \$10000 for the proposal titled "Use of atropine isomers to focus biological activities of benzimidazole derivatives."
Mentor: Taeboem Oh
5. **Ashley Dickinson** (Natural Resources, California State University, Humboldt)
Award: \$9994 for the proposal titled "Assessment of the genetic population structure and extent of clonality in a rare serpentine endemic, *Lathyrus biflorus*, using dd-RAD sequencing."
Mentor: Oscar Vargas
6. **Huy Do** (Chemistry and Biochemistry, San Francisco State University)

Award: \$7491 for the proposal titled “Examining structural and functional conservation of predicted spermidine/spermine N-acetyltransferases.”
Mentor: Misty Kuhn

7. **Alan Garcia** (Computer Science, California State University, Los Angeles)
Award: \$9998 for the proposal titled “Texture Analysis of Macular OCT Images for Diagnosis of Glaucoma.”
Mentor: Navid Amini
8. **Katrina Giambertone** (Marine Science, California State University, Monterey Bay)
Award: \$10000 for the proposal titled “Exploring mechanisms of coral thermal tolerance in Galápagos Pocillopora colonies.”
Mentor: Cheryl Logan
9. **Aida Husain** (Chemistry and Biochemistry, California State University, Long Beach)
Award: \$10000 for the proposal titled “Understanding the Mechanism Underlying SC66-mediated Cell Death.”
Mentor: Deepali Bhandari
10. **Elizabeth Iglesia** (Biological Sciences, California State University, East Bay)
Award: \$10000 for the proposal titled “The role of ATG-2 in PLM dendrite termination in *C. elegans*.”
Mentor: Maria Gallegos
11. **Michelle Kelley** (IMES, San Francisco State University)
Award: \$7845.89 for the proposal titled “Determining seasonal effects on clade distribution and fitness-related traits for *Leptasterias* spp.”
Mentor: Sarah Cohen
12. **Alexandria Koedel** (Biological Sciences, California State Polytechnic University, Pomona)
Award: \$10000 for the proposal titled “Genetics Signatures of Selection for Resistance to Lead Exposure in the Turkey Vulture (*Cathartes aura*) Genome.”
Mentor: Andrea Bonisoli-Alquati
13. **James Koo** (Biological Sciences, California State University, Long Beach)
Award: \$10000 for the proposal titled “Identification of genomic targets of ERF022, a positive regulator of leaf senescence.”
Mentor: Judy Brusslan
14. **Connie Machuca** (Applied Environmental Sciences, California State University, Monterey Bay)
Award: \$10000 for the proposal titled “The movement of pesticides and associated gene expression of pesticide-remediating bacteria in an experimental field bioreactor system.”
Mentor: Nathaniel Jue
15. **Kenneth Paredes** (Biological Sciences, California State Polytechnic University, Pomona)

Award: \$10000 for the proposal titled "Delta 9-THC Exposure: Effects on the Chick Embryo."

Mentor: Juanita Jellyman

16. **Dhaval Patel** (Chemistry & Biochemistry, California State University, Long Beach)

Award: \$10000 for the proposal titled "HDL modulation at the vascular wall."

Mentor: Vasanthi Narayanaswami

17. **Lesly Pereira-Fita** (Biology, California State University, Fresno)

Award: \$10000 for the proposal titled "Genetic incompatibility in dysfunctional *Caenorhabditis briggsae* hybrids."

Mentor: Joseph Ross

18. **Anthony Perez** (Chemistry, California State University, Sacramento)

Award: \$10000 for the proposal titled "Novel Oligosaccharides with Robust Linkages Designed as Broad Spectrum Anti-Viral Agents."

Mentor: Katherine McReynolds

19. **Jeremy Pisor** (Chemistry and Biochemistry, California State University, Fresno)

Award: \$10000 for the proposal titled "Efficient Synthesis of Benzofuran Heterocycles Catalyzed by Gold(I)-NHC Complexes."

Mentor: Hubert Muchalski

20. **Tanya Salman** (Biological Science, California State University, Fullerton)

Award: \$10000 for the proposal titled "Classical Strain Improvement of *Chlamydomonas reinhardtii* for Increased Protein and Lipid Production for Applied Use in Aquaculture."

Mentor: Amybeth Cohen

21. **Cynthia Sanchez** (Biology, California State University, Fresno)

Award: \$10000 for the proposal titled "Phylogenetic Classification of a Novel *Cordyceps* Species in the Foothills of the Sierra Nevada Mountains."

Mentor: Alija Mujic

22. **Jason Shaffer** (Fisheries Biology, California State University, Humboldt)

Award: \$10000 for the proposal titled "Comparison of environmental DNA and snorkel surveys to determine the coho salmon distribution (*Oncorhynchus kisutch*) in the Smith River, California."

Mentor: Andre Buchheister

23. **Barbara Vecchi** (Chemical and Materials Engineering, San José State University)

Award: \$10000 for the proposal titled "The emergence of antifungal drug resistance in *Candida glabrata*."

Mentor: Katy Kao

24. **Shanelle Wikramanayake** (Biology, California State University, Northridge)

Award: \$9800 for the proposal titled "Mechanisms of reproductive isolation along a speciation continuum."

Mentor: Jeanne Robertson

25. **Sabin Yang** (Biology, California State University, Dominguez Hills)
Award: \$10000 for the proposal titled "Investigating the genetic factors that support reward-seeking behavior in a rodent model of cocaine addiction."
Mentor: Philip Vieira
26. **Kevin Calhoun** (Biological Sciences, California State University, San Marcos)
Award: \$9,530 for the proposal titled "Cell Penetrating peptide based RNP delivery of CRISPR/Cpf1 knockout in marine coccolithophores."
Mentor: Betsy Read
27. **Braden Herman** (Natural Resources-Fisheries, California State University, Humboldt)
Award: \$10000 for the proposal titled "Towards Refining eDNA Surveys: A Proof-of-Concept for Using Foreign eDNA to Evaluate eDNA Transport Dynamics in Natural Stream Settings."
Mentor: Andrew Kinziger
28. **Yuting Wang** (Biological Sciences, California State University, Long Beach)
Award: \$10,000 for the proposal titled "Evolution of corolla and pollen forms in the Justicia 'sessile-axillary inflorescence' clade."
Mentor: Amanda Fisher
29. **Amber Clark** (Chemistry and Biochemistry, California State University, Fresno)
Award: \$10,000 for the proposal titled "Harnessing viral capsid assembly mechanism to encapsulate gold nanoparticle inside of virus-like particles."
Mentor: Masaki Uchida
30. **Sally Luong** (Chemistry & Biochemistry, San Diego State University)
Award: \$10,000 for the proposal titled "CRISPR/Cas9-based engineering of a human cell line for study of the mechanism by which NEMO exerts control over IkappaB Kinase activation."
Mentor: Tom Huxford
31. **Leanna Sanchez** (Animal Science, California Polytechnic State University, San Luis Obispo)
Award: \$9,990 for the proposal titled "Molecular Mechanisms Underpinning Uterine Inflammatory Diseases and their Impact on Embryonic Development and Fertility in Dairy Cattle."
Mentor: Mohammed Abo Ismail
32. **Taylor Azizeh** (Moss Landing Marine Labs, San José State University)
Award: \$10,000 for the proposal titled "Using fine-scale data to understand the foraging ecology of emperor penguins (*Aptenodytes forsteri*) at Cape Crozier, Antarctica."
Mentor: Brigitte McDonald
33. **Adrianna Elihu** (Biological Sciences, California State Polytechnic University, Pomona)
Award: \$9,994 for the proposal titled "Not all greenspace is created equal: Evaluating the influence of greenspace and the 'Luxury Effect' on wildlife diversity and people in San Gabriel Valley, California."
Mentor: Janel Ortiz

34. **Stephanie Ruck** (Biology, California State University, San Bernadino)
Award: \$9,902 for the proposal titled “Wildfire Effects on Organismal Behavior.”
Mentor: Breanna Putman

For more information about this program, see the program portfolio at the CSUPERB website (<https://www2.calstate.edu/impact-of-the-csu/research/csuperb/Pages/grants-and-awards-programs.aspx>) or contact Ikhide Imumorin (Executive Director, CSUPERB; iimumorin@sdsu.edu). All CSUPERB grants and awards can be searched at the program’s database: <http://csuperb.org/grants/database/>. Program impacts, including student outcomes and annual reports, can be found at the program dashboard: <https://csuperb.org/grants/csuperb-data-dashboard/>.