



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):

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 Jurney

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 atrope 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: Vasanthy 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 Vecci (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."

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://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/.