CSUPERB Announces 21 Grant Awards to CSU Faculty and Students at 14 Campuses

May 8, 2023

The California State University Program for Education and Research in Biotechnology (CSUPERB) is pleased to announce the Spring 2023 round of Seed Grant awards. Overall CSUPERB is making 21 awards totaling $314,212 to CSU faculty at 14 CSU universities.

Awards were made as part of four system-wide, competitive CSUPERB seed grant programs: New Investigator, Research Development, Industry Partnership Initiative, and Curriculum Development. This round CSUPERB received 49 proposals from faculty members at 19 different CSU campuses. Averaged across all programs, awards were made to 43% of the proposals received.

A. Faculty-Student Collaborative Research New Investigator Grant Awards
The New Investigator Grant Program aims to provide CSU faculty with the resources required to successfully compete for follow-on, externally-funded grants and to involve CSU students in their research programs.

Thirteen CSUPERB New Investigator Grants were approved for funding:

1. **Siavash Ahrar** (Biomedical Engineering, California State University, Long Beach)
   Award: $15,000 for the proposal titled “Microfluidic systems for intergrative studies of Hydra”

2. **Kaylie Carbine (Gardner)** (Psychology, California State University Dominguez Hills)
   Award: $15,000 for the proposal titled “Money or a Mouth-Watering Reward? A Neurophysiological Comparison of Monetary and Food-Related Reward Salience”

3. **Gerald Cobian** (Biological Sciences, California State University, Chico)
   Award: $15,000 for the proposal titled “Priority effects of foliar fungal endophytes on leaf litter fungal communities”

4. **David Ensminger** (Biological Sciences, San José State University)
   Award: $15,000 for the proposal titled “Physiological Impacts of Maternal Stress on Wild Lizards”

5. **Lin Jiang** (Mechanical Engineering, San José State University)
   Award: $14,999 for the proposal titled “Investigating the Biofluid Dynamics in Micro-size Milk Ducts during Breastfeeding using Particle Image Velocimetry System”

6. **Claudia Lucero** (Chemistry, California State University, Sacramento)
   Award: $15,000 for the proposal titled “Palladium-Catalyzed Synthesis of alpha,beta-Unsaturated Esters & Amides from Allylic Alcohols Using Formic Acid as the CO Surrogate”

7. **Frank Macabenta** (Biology and Chemistry, California State University, Monterey Bay)
   Award: $14,950 for the proposal titled “Quality Control and Patterning During Drosophila Embryonic Muscle Development”

8. **Erin Olsan** (Biological Sciences, California State University, Sacramento)
   Award: $14,992 for the proposal titled “Characterization of Nectar Microbes from Sierra Populations of the Genus Aquilegia”

9. **Melissa Pickett** (Biological Sciences, San José State University)
   Award: $15,000 for the proposal titled “The role of the PAR-1/MARK in epithelial polarity maintenance”

10. **Sasha Reschechtko** (Exercise and Nutritional Sciences, San Diego State University)
    Award: $15,000 for the proposal titled “Wet object manipulation a sensitive and ecologically valid readout of sensory ability”

11. **Sarah Smith** (Moss Landing Marine Laboratories, San José State University)
    Award: $15,000 for the proposal titled “Molecular regulation of nitrate assimilation in a model diatom”

12. **Eillen Tecle** (Biology, California State University, California State University, Dominguez Hills)
    Award: $15,000 for the proposal titled “Investigating the role of Host Extracellular Glycoproteins in Intracellular Pathogen Infection”

13. **Stephanie Zaleski** (Chemistry & Biochemistry, California State University, East Bay)
    Award: $14,804 for the proposal titled “Surface-enhanced Raman Spectroscopy (SERS) for the Identification and Quantification of Polyphenolic Compounds in Plant Extracts”

B. Faculty-Student Collaborative Research Development Grant Awards

The Research Development Grant program aims to provide CSU faculty with support to fill gaps in external funding for ongoing research projects or to pilot new, but as-yet unfunded, research directions for established investigators.

Five CSUPERB Research Development Grants were approved for funding:

1. **Cynthia Crawford** (Psychology, California State University, San Bernardino)
   Award: 15000 for the proposal titled “Impact of adolescent nicotine exposure on methamphetamine reward”

2. **Robert Espinoza** (Biology, California State University, Northridge)
   Award: $14,467 for the proposal titled “Project Title Can Human-mediated Dispersal Promote Invasion Success? Using Population Genomics to Test the Paradox of Invasion for a Widely Introduced Reptile”

3. **Veronica Jimenez Ortiz** (Biological Science, California State University, Fullerton)
   Award: $15,000 for the proposal titled “Evaluation of the interactome of potassium channels in the human parasite Trypanosoma cruzi”

4. **Masaki Uchida** (Chemistry and Biochemistry, California State University, Fresno)
   Award: $15,000 for the proposal titled “Rational design of multienzyme protein arrays for efficient catalytic cascade reactions”

5. **Katherine Wilkinson** (Biological Sciences, San José State University)
   Award: $15,000 for the proposal titled “Glutamate Receptor Contributions to Muscle Proprioceptor Function”

C. Industry Partnership Initiative Grant Awards

The Industry Partnership Initiative grant program supports collaborations with industry partners that broaden the opportunities for innovative biotechnology projects, promote multi-disciplinary partnerships, encourage product development and other translational activities, and enrich California’s communities and life sciences industry.

One CSUPERB Industry Partnership Initiative Grants were approved for funding:

1. **Cory Brooks** (Chemistry and Biochemistry, California State University, Fresno)
   Award: $15,000 for the proposal titled “Anti-tumor Mechanism of MUC16 Specific Antibodies for Pancreatic Cancer”

D. Curriculum Development Grant Awards

The Curriculum Development grant program supports the development or revision of innovative lower-level or introductory biotechnology-related courses, laboratories, and first-year experiences.

Two CSUPERB Curriculum Development Grants were approved for funding:

1. **Robert Iafe** (Chemistry & Biochemistry, California State University San Marcos)
   Award: $15,000 for the proposal titled “Integrating Green Chemistry Program Learning Outcomes in Lower Division Organic Chemistry”

2. **Alejandra Yep** (Biological Sciences, California Polytechnic State University, San Luis Obispo)
   Award: $15,000 for the proposal titled “Becoming a researcher: a CURE that immerses first-year students in the scientific process”

For more information about these grant programs, 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).