



## CSUPERB Announces 24 Grant Awards to CSU Faculty and Students at 15 Campuses

May 6, 2022

The California State University Program for Education and Research in Biotechnology (CSUPERB) is pleased to announce the Spring 2022 round of Seed Grant awards. Overall CSUPERB is making 24 awards totaling \$359,830 to CSU faculty at 15 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 year CSUPERB received 62 proposals from faculty members at 19 different CSU campuses. Averaged across all programs, awards were made to 39% 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. **Navid Amini** (Computer Science, California State University, Los Angeles)  
Award: \$15,000 for the proposal titled “Wearable Assistive Technology for Visual Deficits Caused by Epilepsy Surgery”
2. **Shawn Bates** (Psychology, California State University, Chico)  
Award: \$15,000 for the proposal titled “Determining the impact of adolescent stress on opioid use vulnerability”
3. **Bo Fu** (Computer Engineering & Computer Science, California State University, Long Beach)  
Award: \$15,000 for the proposal titled “Accelerating Research in Human Health: Intelligent Visualizations to Support Biomedical Discoveries”
4. **Gianmarc Grazioli** (Chemistry, San José State University)  
Award: \$15,000 for the proposal titled “Introducing Explicit Space into Network Statistical Models of Amyloid Fibril Self-Assembly”

5. **Derrick Groom** (Biology, San Francisco State University)  
Award: \$15,000 for the proposal titled “Monitoring activity and torpor usage patterns in hummingbirds under the heat: combining open-source and remote technologies with physiology”
6. **Sagil James** (Mechanical Engineering, California State University, Fullerton)  
Award: \$15,000 for the proposal titled “3D Bioprinting of Novel Hybrid Bioinks for Biotechnological and Biomedical Applications”
7. **Ram Kandasamy** (Psychology, California State University, East Bay)  
Award: \$15,000 for the proposal titled “Evaluation of pain relief produced by dual FAAH/sEH inhibitors”
8. **Nadia Korovina** (Chemistry and Biochemistry, California State University, Chico)  
Award: \$15,000 for the proposal titled “Biodegradable OLED Materials”
9. **Lua Lopez Perez** (Biology, California State University, San Bernardino)  
Award: \$14,980 for the proposal titled “Using historical samples to investigate the genomic impact of overfishing in black (*Haliotis cracherodii*) and white abalone (*Haliotis sorenseni*) over a century.”
10. **Peter Ramirez** (Biological Sciences, California State University, Long Beach)  
Award: \$15,000 for the proposal titled “Targeting long non-coding RNAs (lncRNAs) for HIV-1 latency reversal”
11. **Matthew Schubert** (Kinesiology, California State University San Marcos)  
Award: \$15,000 for the proposal titled “Acute Exercise, Metabolic Flexibility, and Cardiovascular Disease Risk in Cannabis Users and Non-users”
12. **Sudhir Shrestha** (Engineering Science, Sonoma State University)  
Award: \$14,931 for the proposal titled “Towards non-invasive blood glucose monitoring using breath volatile organic compounds: A novel method for developing machine learning models by placing sensors in daily-life situations”
13. **Joel Slade** (Biology, California State University, Fresno)  
Award: \$14,919 for the proposal titled “Salmonella in the city: disease and immunology of an urban songbird”

## **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.

Six CSUPERB Research Development Grants were approved for funding:

1. **Qiao-Hong Chen** (Chemistry and Biochemistry, California State University, Fresno)  
Award: \$15,000 for the proposal titled “Development of EPI-Based PROTACs for Castration-Resistant Prostate Cancer”
2. **Gilles Muller** (Chemistry, San José State University)  
Award: \$15,000 for the proposal titled “Experimental and Computational Approaches on Characterizing Chiral Mixtures”
3. **Dahyun Oh** (Chemical and Materials Engineering, San José State University)  
Award: \$15,000 for the proposal titled “Biologically assembled nanostructures for aqueous lithium-ion battery electrodes”
4. **Nicholas Salzameda** (Chemistry and Biochemistry, California State University, Fullerton)  
Award: \$15,000 for the proposal titled “Synthesis and evaluation of peptidomimetics as therapeutic leads for the treatment of botulism”
5. **Andrew Steele** (Biological Sciences, California State Polytechnic University, Pomona)  
Award: \$15,000 for the proposal titled “Identification of a dopamine circuit mediating day eating and diet-induced obesity in mice”
6. **Brandon White** (Biological Sciences, San José State University)  
Award: \$15,000 for the proposal titled “Developing tools to investigate the role of SP1 and Cyclin B1 in triple negative breast cancer cells.”

### **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 Grant was approved for funding:

1. **Charmayne Hughes** (Kinesiology, San Francisco State University)  
Award: \$15,000 for the proposal titled “mAtas: computer-vision based system for post-stroke range of motion evaluation”

### **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.

Three CSUPERB Curriculum Development Grants were approved for funding:

1. **Mark Barash** (Justice Studies, San José State University)  
Award: \$15,000 for the proposal titled “Biological Criminalistics New Course Development”
2. **Horace Crogman** (Physics, California State University, Dominguez Hills)  
Award: \$15,000 for the proposal titled “Using Adaptive technology to Create a Hybrid Biophysics Curriculum Program (HBCP) to Enhance Student Learning”
3. **Zurine De Miguel** (Psychology, California State University, Monterey Bay)  
Award: \$15,000 for the proposal titled “Course-based Undergraduate research experiences using brain images to teach stereology”
4. **Yujuan Liu** (Chemistry, California State University, Sacramento)  
Award: \$15,000 for the proposal titled “Integrating Research-Based Laboratory Projects into General Chemistry”

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](mailto:iimumorin@sdsu.edu)). All CSUPERB grants and awards can be searched at the program’s database: <http://csuperb.org/grants/database/>.