

FACULTY-STUDENT COLLABORATIVE RESEARCH: DEVELOPMENT GRANT PROGRAM SPRING 2025 REQUEST FOR PROPOSALS

www.calstate.edu/csubiotech

Key Dates & Information:

ugust 26, 2024
ebruary 3, 2025 before 5:00 p.m. pacific time
ay, 2025
15,000
8 months from the project start date

Program Description:

The CSU Biotechnology (CSUBIOTECH) program aims to increase the overall number of externally funded biotechnology research investigators across the California State University (CSU) system. In addition, CSUBIOTECH recognizes the importance of research experiences in biotechnology student success. Research is a form of engaged learning, but also offers students the opportunity to acquire abilities on which to build a life science career. The Faculty-Student Collaborative Research Development (RD) Grant program aims to provide CSU faculty with continuing resources to fill gaps in external funding for ongoing research projects or to pilot new, but as-yet unfunded, research directions for established investigators. The RD grants will also support continued involvement of CSU students in faculty scholarship and research programs.

SPRING 2025 Proposal Review Criteria:

- Project plans and budgets must be tied to data collection necessary to address issues raised by peer reviewers, funding agencies or organizations for subsequent submission or re-submission of external-to-the-CSU research grant applications.
- Research projects must be original and/or innovative.
- Research projects must be feasible within the time and budget proposed.
- Research projects must involve CSU students in a significant way.
- If applicable, proposals should include letters of support from co-PIs or key collaborators detailing their role and commitment to the research project.
- In keeping with calls for plain writing to improve science and technical communication, CSUBIOTECH review panels will consider the effectiveness of the non-technical abstract in their assessment of proposals (see paper by Rakedzon and coworkers, http://bit.ly/2uMqkpt).

Eligibility Criteria:

• The proposed research project must be biotechnology related. CSUBIOTECH defines biotechnology as a *fusion of biology and technology*. BIO (<u>https://www.bio.org/what-biotechnology</u>) lists biotechnology

examples, applications and sectors; CSUBIOTECH explicitly adds to these lists health IT and medical device research and development. CSUBIOTECH welcomes and encourages applications from CSU faculty in all disciplines related to the current practice of biotechnology, including but not limited to life sciences, physical sciences, clinical sciences, math, computer science, agricultural science, engineering, and/or business.

- Investigators & Key Collaborators: The Research Development Grant program is open to tenured/tenure-track (T/TT) CSU faculty who have received external support for their CSU-based research projects exceeding a sum total of more than \$15,000 while they were tenured/tenure-track at a CSU academic institution. Faculty who have received less than a combined total of \$15,000 in external-to-the-CSU support, and/or support that consists only of campus equipment or campus education grants are not eligible and should apply instead to the New Investigator grant program. Other CSU staff may be listed as co-Principal Investigators (PIs) or key collaborators. CSUBIOTECH will consider only one proposal per PI at a time to this program. Investigators applying to this program are welcome to apply to other CSUBIOTECH grants and awards programs.
- Development Nature of the Proposal: The aim of the Research Development Grant program is to support established CSU PIs who face a gap in external funding for ongoing research programs or who face difficulty getting funding for a new research direction. In either case, applicants are eligible for this program only after they have been unsuccessful winning external grant support for the project. Research Development Grants should provide PIs the additional time and support needed to strengthen a competitive renewal or resubmission.
- As a result, applicants must describe or provide evidence of unsuccessful attempt(s) to obtain external-to-the-CSU funding for the research project described in the CSUBIOTECH Research Grant proposal. Proposals to the CSUBIOTECH program, where the external funding agency has NOT YET officially declined the PI's submission are not considered eligible. Evidence would consist of reviews or other evaluations from externalto-the-CSU entities, government agencies or other research funding organizations. When proposal reviews are available, they must be appended to the Research Development proposal. Applicants can redact scores; CSUBIOTECH review panels seek only the review comments. When reviews are greater than 3 years in age, the applicant must justify how the science/research idea remains relevant but do not need to justify the reason for the length of time since the initial reviews were received. **Special Note: Proposals received by CSUBIOTECH that do not describe prior attempt(s) to obtain external-to-the-CSU funding for the research project before submitting to the RD program will be administratively withdrawn from consideration by the peer review committee.**
- Existing support from collaborators or other CSU sources (e.g. intramural grants, release time, shared and donated equipment, and other seed program funds) should be clearly identified and described. PIs can include letters of support demonstrating institutional or collaborator support to bolster the feasibility of the research project.
- *Budget:* CSUBIOTECH will accept Research Development grant proposals with budgets **up to \$15,000**. Duration of the award will be 18 months from the project start date (approximately June 1, 2025 for Spring 2025 grants). Exact project start dates are contingent upon award conditions, including IRB or IACUC approvals on campus.

Budget and Award Restrictions:

• CSUBIOTECH grants are issued as a result of an internal competition within the CSU and are not subject to Facilities and Administrative (F&A), or indirect, costs. F&A costs are not allowed as a grant-funded expense in proposals submitted in response to RFPs from programs, like CSUBIOTECH, that receive the majority of their

support from legislatively appropriated funds, CSU lottery funds or student fees (including State University fees). The F&A foregone at the campus/auxiliary's federally negotiated off-campus rate may be shown as cost match on the proposal. This amount may be used by the auxiliary or enterprise fund as an offset to the university's cost allocation plan, in accordance with EO 753/1000.

- Faculty effort can be budgeted for up to 3 WTU at the Lecturer Replacement Rate salary amounts calculated as follows for 2024 from the Lecturer Class 2358 range 3 Base (\$6,221) x .20 (3WTU) x 6 (paychecks) totaling \$7,465 except for "additional employment" during faculty normally employed periods. It can be used for "additional employment" during summer, spring and winter breaks when not employed by the campus as well as for "release time" during the normally employed periods. Proposals should indicate how much time each faculty/key personnel will spend on the project and when they will be working on the project.
- Student salaries proposed and paid should comply with amounts determined by campus human resources departments. CSUBIOTECH will not approve any salary or rate in excess of campus limitations. Applicants must ensure funds paid to students are not in conflict with these limitations or any others set by graduate or undergraduate programs with which the student may be involved. CSUBIOTECH funds cannot be used to supplement pay for effort if the student is already receiving payroll from another source. Employment of foreign nationals is limited to individuals who meet the conditions set by applicant's campus human resources department policies regarding eligibility to receive compensation in the United States. Proposals should identify students by name when possible, the student's status (undergraduate or graduate student), the hourly salary rate, the number of hours each student will dedicate to the project, and whether they will be working during the summer and/or academic year.
- Travel to professional meetings is not allowed with CSUBIOTECH Seed Grant funds. Apply to CSUBIOTECH's Travel Grants Program to cover those expenses.

Proposal Submission:

Applicants must submit their completed and signed proposals by Monday, February 1, 2025 by 5:00 p.m. Pacific Time.

The complete proposal package, including signed cover sheet, must be submitted electronically on the Fall 2024 Research Development Grant proposal template using CSUBIOTECH's InfoReady proposal submission system before the deadline on Thursday, August 1, 2024, before 5:00 p.m. pacific time (use "Apply" link at https://www.calstate.edu/impact-of-the-csu/research/csubiotech/Pages/grants-and-awards-programs.aspx. Faculty applicants login to the system using their campus ID/username and password. Only Microsoft Word or Adobe PDF file formats are compatible with the system. Applicants who are unable to access or use the InfoReady submission system should send their completed proposal template, including any additional documentation or support letters, to James Schmitt at jcschmitt@sdsu.edu by the submission deadline of February 3, 2025 at 5pm.

Any questions about using the InfoReady submission system can be directed to Tyson Gadd at tgadd@sdsu.edu.

Proposals must adhere to length guidelines stated in the proposal submission system and listed in the proposal drafting template. Failure to follow these guidelines may result in proposal rejection during administrative review. The Spring 2025 Proposal Template and the grant submission link can be found on the CSUBIOTECH website.

Proposals that are complete and meet eligibility requirements will be evaluated by a review panel comprised of CSU faculty. The proposal review meeting will be held in April 2025. The CSUBIOTECH program office makes final funding decisions. Funding decisions are based on recommendations made by the review panel, available funds, and CSUBIOTECH strategic priorities. As part of the proposal review process, all PIs will receive written reviews.

CSUBIOTECH will not make awards to faculty members who have outstanding, past-due final reports for grants made under this or other CSUBIOTECH grant programs.

Generative Artificial Intelligence Technology:

CSUBIOTECH has adopted a policy on the use of generative artificial intelligence technology similar to that of the National Science Foundation (NSF). The NSF policy can be found at https://new.nsf.gov/news/notice-to-the- research-community-on-ai. The CSUBIOTECH policy applies as follows to all grant and award programs, including peer review.

To safeguard the integrity of the development and evaluation of proposals in the merit review process,

- CSUBIOTECH reviewers are prohibited from uploading any content from proposals, review information and related records to non-approved generative AI tools.
- Proposers have the option to indicated in the project description or proposal/application documents the extent to which, if any, generative AI technology was used and how it was used to develop their proposal.

Use of generative AI by reviewers in CSUBIOTECH review panels. CSUBIOTECH reviewers agree to maintain confidentiality of the review process, reviewer identities, and application/proposal materials submitted to CSUBIOTECH in response to grant and award Requests-for-Proposals (RFP's) and Requests-for-Nominations (RFN's).

The obligation to maintain confidentiality of review related information extends to the use of generative AI tools and "checking" programs. CSUBIOTECH reviewers are prohibited from uploading any content from proposals, review information and related records to non-approved generative AI tools or websites not approved by the CSUBIOTECH program office. If reviewers take this action, CSUBIOTECH will consider it a violation of the program's confidentiality policy. CSUBIOTECH reviewers may share publicly available information with current generation generative AI tools.

Use of generative AI in proposal preparation. Proposers are encouraged to indicate in the project description or narrative of their proposals and applications the extent to which, if any, generative AI technology was used and how it was used to develop their proposal. Similar to NSF, CSUBIOTECH is studying the use of generative artificial intelligence in responses to our calls for proposals and nominations. CSUBIOTECH will continue to review NSF policy and may adapt its own policies as more is learned about this tool in future rounds of grant and award programs. To be clear, the use of generative AI in proposal preparation is not prohibited in CSUBIOTECH grant and award programs.

Proposers are responsible for the accuracy and authenticity of their proposal submission in consideration for peer review, including content developed with the assistance of generative AI tools. CSUBIOTECH's policies stated in its Code-of-Conduct and Applicant Certification statements remain in force with regards to the use of generative artificial intelligence technology. Generative AI tools may create risks of violating these rules and regulations, and proposers and awardees are responsible for ensuring the integrity of their proposal and reporting of research results. This policy does not preclude research on generative AI as a topic of study.

CSUBIOTECH adopts the definition of GAI as stated in the NSF guidelines: "Generative artificial intelligence (GAI) is a technology that can create content, such as text, images, audio, or video, when prompted by a user. Generative AI systems create responses using algorithms often trained on large datasets of information, such as text and images from the internet." (Source: U.S. Government Accountability Office, Science and Tech Spotlight: Generative AI; June 2023 available at www.gao.gov/assets/830/826491.pdf)

CSUBIOTECH Statement of Principles on Professional Behavior, Policies and Procedures:

CSUBIOTECH values diverse perspectives where all individuals can flourish. CSUBIOTECH is dedicated to providing an environment that fosters intellectual curiosity and creativity, free and lively debate conducted with mutual respect for individuals, and freedom from intolerance. These values are applicable to any aspect of CSUBIOTECH's work, including meetings, symposia, and funded activities. Specifically, members of our community value:

- Critical scholarly discourse for the purpose of understanding, advancing scientific ideas, and educating the next generation of science and engineering practitioners;
- Education and research environments where all people are treated equally, regardless of race, gender, ethnicity, sexual orientation and free of bias, hostility, and harassment of any kind;
- Conversations and discussions where community members can share ideas in a collegial atmosphere that is inclusive and values everyone's input and opportunity to participate;
- Advocacy for equality and inclusivity in science;
- The use of inclusive examples, graphics, and stories in presentations and proposals;
- Access for all community members, including traditionally underrepresented groups, to fully participate in and become leaders in science;
- The support and promotion of the education and careers of all scientists, engineers, and bio-entrepreneurs;
- Leadership in our fields to strengthen scientific mentorship and create an atmosphere of collaboration;
- Commitment to our own education and participation in activities related to recognizing and eliminating implicit bias.

Policies

- 1) All participants in CSUBIOTECH events and activities are expected to follow the requirements of Title V, Title IX, and California State University (CSU) Executive Orders and adhere to the CSUBIOTECH Principles of Professional Behavior and values. Non-CSU participants who do not follow these expectations may be asked to leave a CSUBIOTECH event or activity and/or prohibited from participation in future CSUBIOTECH events or activities. Individuals can report incidents immediately to the CSUBIOTECH designee to facilitate this process.
- 2) Individuals found in violation of Title V or IX (<u>https://www2.calstate.edu/titleix</u>) or CSU Executive Orders 1096 or 1097 (<u>https://www2.calstate.edu/titleix/Pages/policies.aspx</u>) are not eligible to receive CSUBIOTECH funding or participate in CSUBIOTECH program activities for a period of 5 years from the final substantiation of the violation or the end of any current grant award, whichever is later. Faculty who are found to be in violation before funds are transferred for an award, will be ineligible to receive funds for the award.
- After a five year ineligibility period, individuals found in violation of relevant policy for a second time lose eligibility for all future CSUBIOTECH funding or participation in CSUBIOTECH related activities permanently. Relevant CSU Executive Orders include (https://www2.calstate.edu/titleix/Pages/policies.aspx):
 - a. Executive Order 1095 Revised (Systemwide Sex Discrimination, Sexual Harassment, Sexual Misconduct, Dating and Domestic Violence, and Stalking Policy);
 - b. Executive Order 1096 Revised (Systemwide Policy Prohibiting Discrimination, Harassment, Retaliation, Sexual Misconduct, Dating and Domestic Violence, and Stalking against Employees and Third Parties and Systemwide Procedure for Addressing Such Complaints by Employees and Third Parties); and
 - c. Executive Order 1097 Revised (Systemwide Policy Prohibiting Discrimination, Harassment and Retaliation, Sexual Misconduct, Dating and Domestic Violence, and Stalking against Students and Systemwide Procedure for Addressing Such Complaints by Students) may be found at the following website address: http://www.calstate.edu/eo/.

Certifications

1) CSUBIOTECH will include the Statement of Principles on Professional Behavior (section III above) in event registration processes. Event participants will be asked to acknowledge the principles.

- 2) Applications for CSUBIOTECH funding, award opportunities, or event registrations will include the following certifications:
 - a. Applicants will indicate whether they have been found in violation of Title V, Title IX, or CSU Executive Orders 1096 or 1097 in the last 5 years.
 - b. Applicants will allow the campus to disclose to the CSUBIOTECH program office any substantiated violations of Title V, IX, or CSU Executive Orders 1096 or 1097.

Reporting Procedures:

- 1) Incidents that involve CSU faculty, staff, or students only
 - Individuals who believe there has been a violation of Title V, IX, or Executive Orders 1096 or 1097 at a CSUBIOTECH event or activity should report the event following CSU policy and procedures on their home campus.
 - b. Prior to transfer of grant or awards to campus, CSUBIOTECH will ask for campus confirmation that the awardee has not been found in violation of Title V, Title IX, or Executive Orders 1096 or 1097 in the prior 5 years. The campus information provided will include only the existence of a final, substantiated violation and the date of the violation. The information will be kept confidential in the CSUBIOTECH program office.
- 2) Incidents that involve non-CSU individuals
 - a. Suspected violations of Title V, Title IX, or Executive Orders 1096 or 1097 by participants not affiliated with the CSU should be reported to CSUBIOTECH administration immediately. Participants may also e-mail CSUBIOTECH administration to report at a later date, if so desired.

Post-Award Reporting Requirements:

Successful PIs are required to submit a final report to the CSUBIOTECH within 90 days of the project end date using the InfoReady platform where the initial proposal was submitted. The system will send reminders as the duedate approaches. Final reports document the need for and help justify continuation of the program. CSUBIOTECH will also contact PIs and co-PIs for longer-term impact reporting.

Successful PIs are strongly encouraged to present the results of their CSUBIOTECH-funded project at the January 2027 or 2028 Annual CSU Biotechnology Symposium.

Program Contacts:

Submission questions: csubiotech@sdsu.edu or tgadd@sdsu.edu Program and RFP questions: James Schmitt Program Administrator, CSUBIOTECH jcschmitt@sdsu.edu

Ikhide Imumorin Executive Director, CSUBIOTECH iimumorin@sdsu.edu