

## CURRICULUM DEVELOPMENT GRANT PROGRAM 2025 REQUEST FOR PROPOSALS

[www.calstate.edu/csubiotech](http://www.calstate.edu/csubiotech)

### Key Dates & Information:

RFP Release Date: August 26, 2024

Proposal Due Date: February 3, 2025 before 5:00 p.m. pacific time

Award Notification: May, 2025

Maximum Award Amount: \$15,000

Project Duration: Up to 18 months from the project start date (approximately June 1, 2025)

### Program Description:

The CSU Biotechnology Program (CSUBIOTECH) aims to innovate biotechnology education across the CSU. Education researchers, federal agencies, employers and professional societies have called for change in undergraduate life science education and other biotechnology-related disciplines.<sup>1,2</sup> Curriculum improvement efforts aim not only to increase student engagement and retention, but also to ensure undergraduate education reflects “how science is done in the laboratory and in the field.”<sup>2</sup>

The 2025 Curriculum Development grant program will support the development of innovative general education courses, laboratories, and first-year experiences, as well as revisions to lower-level or introductory biotechnology-related courses. CSUBIOTECH emphasizes the system-wide dissemination of curricular materials and outcomes across the CSU system to engage, impact, and prepare students in biotechnology.

### 2025 Proposal Review Criteria:

- Proposed projects must be original and/or innovative.
- Proposed projects must directly engage and impact first- or second-year (lower division) CSU students.
- Proposed projects must address the three major tenets of scientific teaching: active learning, student diversity and assessment (see Handelsman citation below for more information).
- Projects must be feasible within the time and budget proposed. If relevant, projects must be feasible within campus administrative frameworks for course development and approval; successful proposals will include letters of support from appropriate chairs and/or deans.
- Proposed projects must have a plan to publish or share project work, student learning outcomes and evaluations with CSU colleagues system-wide.

<sup>1</sup> Handelsman, Ebert-May, Beichner, Bruns, Chang, DeHaan, Gentile, Lauffer, Stewart, Tilghman & Wood (2004) Scientific Teaching. *Science* 304: 521-522. Available online: <http://www.sciencemag.org/content/304/5670/521.full>

<sup>2</sup> Vision & Change in Undergraduate Biology Education (2011). AAAS & National Science Foundation. Available at: <https://live-visionandchange.pantheonsite.io/wp-content/uploads/2011/03/Revised-Vision-and-Change-Final-Report.pdf>

- 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 (For help, see paper by Rakedzon and coworkers, <http://bit.ly/2uMqkpt>).

#### Eligibility Criteria:

- The proposed project must be biotechnology-related. CSUBIOTECH defines biotechnology as a ***fusion of biology and technology***. BIO (<https://www.bio.org/what-biotechnology>) 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 Curriculum Development grant program is open to tenured/tenure-track (T/TT) CSU faculty. Other CSU staff or instructors may be listed as co-Principal Investigators (PIs) or key collaborators. CSUBIOTECH will consider only one proposal per PI or co-PI at a time to the Curriculum Development grant program. Investigators applying to this grant program are also welcome to apply to other CSUBIOTECH grant and award programs.
- *Budget:* CSUBIOTECH will accept Curriculum 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). Exact project start dates are contingent upon award conditions, including IRB, IBC, or IACUC approvals on campus.
- Applicants who have been found liable of a substantiated violation of Title V, Title IX, or CSU Executive Orders 1096 or 1097 in the last 5 years (after all investigations and appeals have been exhausted) are NOT eligible to apply for any CSUBIOTECH awards.

#### 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 salary is allowed, including fringe, 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. Proposals including faculty effort will require their dean’s approval on the proposal template. A dean’s designee signature is not acceptable in these instances.
- 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 costs.
- Applicants who have been found liable of a substantiated violation of Title V, Title IX, or CSU Executive Orders 1096 or 1097 in the last 5 years (after all investigations and appeals have been exhausted) are NOT eligible to apply for any CSUBIOTECH awards.

### **Proposal Submission:**

**Applicants must submit their completed and signed proposals by Monday, February 3, 2025 by 5:00 p.m. Pacific Time.**

The complete proposal package, including signed cover sheet, must be submitted electronically on the 2025 Curriculum Development Grant proposal template using CSUBIOTECH's InfoReady proposal submission system before the deadline on Thursday, February 3, 2025, 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](mailto: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](mailto: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. Both the 2025 Proposal Template and the Curriculum Development Grant submission link can be found on the CSUBIOTECH website.

Proposals that are complete and meet eligibility requirements will be evaluated for merit by a review panel comprised of CSU faculty with expertise reflecting the applications received. The proposal review meeting will be held in April, 2025. The CSUBIOTECH program office will make 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](https://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 or [CSU Executive Orders 1096 or 1097](#) 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.
- 3) 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:](#)
  - 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
  - a. 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 due-date 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 2026 and/or 2027 Annual CSU Biotechnology Symposium.

#### Contacts:

Submission questions:

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tgadd@sdsu.edu

Program and RFP questions:

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