

Quantum CU Boulder/OEDIT Seed Grants

2023-2024

Summary Information

- **Award Amount:** \$50,000
- **Award Duration:** 18 months
- **Total funded awards:** 8 awards anticipated in 2023-2024
- **Proposal Deadline:** October 31, 2023
- **Total Program Funding:** \$1.2M over 3 years
- **Funding Offices:** CU Boulder Research & Innovation Office (RIO)
- **Application Portal:** <https://cuboulder.secure-platform.com/a/solicitations/86/home>

Program Description

In partnership with the Colorado Office of Economic Development and International Trade (OEDIT), the University of Colorado welcomes proposals for *translational quantum research seed grants*. Seed grants are open to any Colorado research institution and industry partners. The goals of the programs are to incentivize innovations launched out of the lab and help them along the development path to new programs and businesses. High-risk proposals that push a boundary in quantum applications are encouraged. The Selection Committee will pay particular attention to developing a diverse portfolio of awardees, including recruiting potential proposers from minority-service institutions and industry partners from outside the Front Range (e.g., the western slope, eastern plains, SW Colorado). Two types of seed grant proposals will be considered:

- **Quantum: Research-to-Industry Collaboration Seed Grants:** The quantum research-to-industry collaboration seed grants create incentives to commercialize technologies used in academic research environments. These seed grants would fund joint academic-industry partnerships that translate specific technologies into a targeted quantum industry. (Requires an academic and an industry/national laboratory partner)
- **Quantum: Use-Inspired Technology Seed Grants:** Use-inspired seed grants would fund the development of academic-based quantum technologies to

address real world applications. A successful application will have an identified quantum application, a path to commercialization, and an identified economic and/or societal impact. These seed grants are designed to help researchers bridge their work to existing pathways created by OEDIT, angel investors, and incubators. (Can be an academic institution-only submission)

Connecting to the OEDIT Funding Pipeline

These quantum seed grants are designed to help researchers and industry partners to take a step forward in the development cycle. They can prepare participants for proposal opportunities in the OEDIT Advanced Industry Pipeline, including:

- *Advanced Industries Proof-of-Concept Grants* that help Colorado research institutions speed up applied research in advanced industries and commercialize products and services with the private sector. (Up to \$150,000)
- *Advanced Industries Early-Stage Capital and Retention Grants* that support helps Colorado-based technologies that will be created or manufactured in Colorado. (Up to \$250,000)

Eligibility

Quantum researchers and companies in the State of Colorado are eligible for this award. Seed grants can be initiated either by an institution of higher education or an industry partner. Additional eligibility information:

- Applicants may submit no more than one proposal as a funded PI. Applicants can serve on multiple proposals as an unpaid co-PI.
- Recipients with active seed grant awards may not be compensated for another project but may serve as an unpaid co-PI. Like PIs, co-PIs may only be funded in one active seed grant.
- National laboratories, such as Sandia National Lab, can be a partner on a seed grant, as long as they partner with a Colorado academic or industry partner, and the work based in and benefits Colorado.
- Industry partners must be headquartered in Colorado or have at least 50% of its workforce in the State. The work must be completed in Colorado.
- Projects with a primary focus on curriculum development are not eligible.
- Special consideration will be given to proposals coming from outside the Front Range and the Boulder-Denver corridor.

Application Process and Requirements

Seed grant proposals are [submitted electronically through this application portal](#).

2023 Timeline

September 2023	Program launch
October 31, 2023	Proposal deadline
December, 2023	Applicants notified of proposal status
January, 2024	Project funding available

Proposal Information

Proposals should use clear writing appropriate for non-specialists and should include the following components in a single PDF. The maximum length is 3 pages, including tables, figures, charts, references, and any other supporting information.

- **Executive Summary:** A short summary of the project, goals and impact. (100 words max.)
- **Project Description:** Describe the aims, significance, methods, and expected outcomes of the project, highlighting any new or creative directions. Include a description of the team and their ability to carry out the work.
- **Bridging Discovery to Market:** What is the core idea, discovery, or innovation? Describe why this effort represents a clear and compelling step forward in moving this quantum idea/discovery/innovation towards commercial application.
- **Commercial Potential:** Describe any validation that has been done for this work. Suggested topics include: Who will be the customers for the application, and do you have input from them? What is the current market (size, trends, players)? What is the proposed competitive advantage compared to currently available solutions? Has an invention disclosure form been submitted or a patent application filed?

Budget

- Maximum Budget Request: \$50,000
- No overhead and/or fees can be included in these awards.
- Up to 2 pages total.

Budget Continued

In no more than 1 page, please outline the following project budget elements. Concisely provide a justification of the items requested in the budget. Particular attention should be given to justifying budget items that may not be obvious to reviewers who are familiar with (but are not experts in) your specific field. Include any cost-sharing or matching by participating organization.

These elements could include:

- A. Personnel: include name, role on project, base of salary, percentage of effort devoted to the project, salary requested, and fringe benefits.
- B. Materials and supplies: Include an itemized list, along with a justification of how the project will use these.
- C. Equipment: List each item of equipment (>\$5000 and with a useful life of more than one year) with justification of why the project needs to make the purchase, as well as a bases of cost (e.g., vendor quote)
- D. Travel: Provide the purpose, destination, travelers (name or position/role), and duration of each trip, along with all associated costs (e.g., mileage, airfare, lodging, etc.), using federal MI&E rates.
- E. Other: Please detail any other costs attributed to the projects, with associated detail.

Project Duration: Up to 18 months.

Other Important Information: If selected, project partners will be expected to execute (or have executed) an effective managed IP agreement before work begins. As part of this seed grant effort, participating higher education institutions will develop a managed IP template to be used for their selected projects.

Evaluation Criteria

The rubric for proposal evaluation will center on the following questions and should be explicitly addressed and quantified in the proposal:

- 1) **Bridging discovery to market:** Does the proposed work represent a clear and compelling step forward in moving a quantum application towards commercial viability?
- 2) **Likelihood of success:** Does the proposed work have a clear path towards success? If successful, will the outcome be ready for second-stage investment or commercial trajectories?

3) **The Team:** Is the proposal team capable of bringing the project to fruition?

4) **Commercial Potential:** Has the need for the application been validated (e.g., via customer discovery)? Is the addressable market big enough to support the commercialization effort? Is the path to market feasible?

5) **Geographic diversity:** Special consideration will be given to proposals that are, in whole or in part, based outside of the Boulder-Denver corridor.

Questions? Please contact Dr. Emily CoBabe-Ammann at cobabee@colorado.edu.