Quantum City Consortia Awards Expression of Interest (EoI) Call

Context

Quantum City is building an ecosystem for quantum science and technology in Alberta by bringing together researchers and developers, industry and adopters of quantum technologies and services. To support this vision, Quantum City is offering Consortia Awards valued at up to $140,000 for each of two years.

The purpose of these awards is to fund interdisciplinary consortia for creating adoption pathways to capture the benefits of quantum technology.

The award is subject to matching funds equal to or greater than the request to Quantum City. It is anticipated that Quantum City will invest in up to four proposals (i.e. the total maximum allocation of this call is $1.12M over two years); full or partial funding will be up to the panel's review.

Award Details

The primary applicant must hold an academic appointment (tenured or tenure-track) at one of the three eligible universities, namely, University of Alberta, University of Calgary, or University of Lethbridge. The consortium funded by this award must be comprised of a minimum of three investigators drawn from at least two eligible universities and at least two disciplines. If participants have difficulty finding investigators who meet the outlined requirements, we can assist with matchmaking to help build a compliant and interdisciplinary consortium.

To describe the maturity of research projects, we use the language of Solution Readiness Levels (SRLs) as outlined by the Innovation for Defense Excellence and Security (IDEaS) Program. A description of these levels is provided at the end of this document.

The award is aimed at advancing projects between Solution Readiness Levels (SRLs) 3-7. Projects must be at least at SRL 3 at the start of the consortium, and the goal must be to advance to a higher SRL by the end of the funding period. There is no obligation for a project to finish the period of consortia funding at an SRL 7, and we encourage applicants to set reasonable goals for SRL advancement.

Eligible Costs for the consortia awards:

	Eligible as project costs	Eligible for Quantum City funding
Personnel (e.g. technicians and research associates)	✓	
Students and post-doctoral fellows as per Tri-Agency guidelines	✓	✓
Equipment/infrastructure	✓	
Research operating expenditures (laboratory supplies and materials only, not equipment and computer/laptop)	✓	
Quantum computing access	✓	✓ (up to $30k per project)
Travel to attend workshop/conference related to the funded project and to partnering institute on the funded project	✓	✓ (up to $7K annually)

Quantum City Consortia awards will provide up to 50% of the total project cost. Matching funds must be secured and verified before awarding funds for the first year; second-year funding is contingent on securing funds for the second year. Prospective federal competitions (e.g. NSERC Alliance, NSERC Discovery grants and etc.) are not considered as eligible contribution. Government of Alberta funding is not an eligible contribution.

Project selection process

The first step in applying for a Quantum City Consortia Award is to submit an expression of interest (EoI) as described below. All EoIs will be screened for eligibility, and all applicants who submit an EoI will be contacted and advised of the outcome. Decisions will be communicated to applicants as they become available. The EoI

review process is expected to be quick, and applicants should expect to hear back from Quantum City within a month of their EoI submission.

Applicants who successfully pass the EoI assessment round will be invited to submit a full application. The full application will be reviewed by a panel of at least three external reviewers. This review process is expected to take up to two months. Successful review by this panel is required to secure Consortia Awards Funding.

Information for completing your EoI

The EOI form contains the following sections:

- Applicant and contact information.
- Project description. The description must explain how your project will address one or more of the specific research objectives and how it will create adoption pathways to capture the benefits of quantum technology. (Maximum 500 words)
- SRLs at the start and anticipated SRLs at the end of the proposed project. Please include a one sentence explanation justifying the choices.
- Budget and justification, including potential matching funds.
- A discussion of how equity, diversity and inclusion considerations will be addressed in the project. (Maximum 250 words)

Interested applicants are encouraged to submit EoIs for projects even if they do not yet meet the eligibility requirements (i.e. number of collaborators or matching funding). In this case Quantum City will review the EoI and, with the applicant's permission, will share the project and attempt to make a match with interested researchers from other institutions and/or approach corporate funding partners. If such a match can be made Quantum City will invite interested parties to re-submit an EoI, which may then progress to the formal application stage.

Please submit your EoI by completing the individual questions on the Microsoft Form. Click here for the Microsoft Form link.

Deadline

The submission of EoIs will open on December 16, 2024. EoIs will be reviewed on a rolling basis, and researchers are invited to submit them at their earliest convenience. **However, projects must have submitted an EoI by March 5th, 2025, to be eligible for the 2025-2027 round of Consortia Funding.**

For more information, or if you have any questions, please contact funding.quantumcity@ucalgary.ca.

Solution Readiness Levels

Following the definitions set out in the IDEaS Program, Quantum City will analyze project readiness using the following 9 solution readiness levels:

SRL 1: Identification and observation of basic principles and properties.

SRL 2: Definitions of practical applications. Formulation of concepts.

SRL 3: Observation and analysis through analytical research, laboratory research or experiments.

SRL 4: Proof of concept that is based upon the integration of applications and concepts to demonstrate viability.

SRL 5: Validation defined as the refined integration of applications or concepts to confirm validity.

SRL 6: Simulated demonstration of a near-end state solution and testing in a simulated environment.

SRL 7: Real-world demonstration of a near-end state solution and testing in an appropriate real-world environment.

SRL 8: Qualified solution which is the completion of end state solution and refinement through testing.

SRL 9: Proven solution that is based upon final solution implementation and success.