

# Resource for Quantum City Consortia Award Applications

## General Information

### 1. Context

Quantum City is building an ecosystem for quantum science and technology in Alberta bringing together researchers and developers, industry and adopters of quantum technologies and services. Quantum City's vision is to be the place where quantum technology becomes quantum solutions, capturing the benefits of quantum technologies by creating adoption pathways. To realize this vision, Quantum City is funding the Consortia Award, which supports quantum and quantum-adjacent projects aimed at the development of quantum solutions.

### 2. Purpose

To fund interdisciplinary consortia for creating adoption pathways to capture the benefits of quantum technology through the development of any areas of the following areas of quantum technology:

- quantum algorithms/encryption, including post-quantum cryptography
- quantum communications
- quantum computing
- quantum materials
- quantum sensing

with context provided in the [National Quantum Strategy](#).

### 3. Budget

The total maximum allocation of this funding call is \$1.12M over two years. Quantum City will invest in up to four proposals, and full or partial funding will be up to the external panel's review and Quantum City's discretion. Quantum City Consortia Awards will provide up to 50% of the total project cost, and the project application must include a budget that shows both Quantum City and matching-funds contributions. Each application can apply for a maximum of \$140K annually.

### 4. Eligibility and Team Composition

- The principal investigator must hold an academic appointment (tenured, tenure-track or professor emeritus position) at one of the three eligible universities, namely, University of Alberta, University of Calgary, or University of Lethbridge.
- The team must have a minimum of three investigators (one principal investigator and two co-investigators) drawn from at least two eligible universities and drawn from at least two disciplines.
- Collaborators and partner organizations are optional.

## 5. Eligible Costs

	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)

## 6. Eligible and Non-Eligible Contributions

Quantum City Consortia Awards will provide up to 50% of the total project cost, and the project application must include a budget that shows both Quantum City and matching-funds contributions. Matching funds must be secured and verified before awarding funds for the first year; second-year funding is contingent on securing matching funds.

Government of Alberta funding is not eligible as a matching contribution. In-kind (e.g., hours) can be recorded as a resource in the application and specifically within the total budget but is ineligible as a matching contribution.

Eligible Funding Sources	Non-Eligible Funding Sources
<ul style="list-style-type: none"> <li>• Institutional funds</li> <li>• Natural Sciences and Engineering Research Council (NSERC)</li> <li>• Canadian Institute for Health Research (CIHR)</li> <li>• Social Sciences and Humanities Research Council (SSHRC)</li> <li>• NSERC Industrial Research Chairs grant and Canada Research Chairs (CRC) - Research Operating only (Chair salaries associated with either program not eligible)</li> <li>• ISED programs (e.g., Strategic Innovation Fund)</li> <li>• Canada Foundation for Innovation (infrastructure operating fund component)</li> <li>• MITACS</li> <li>• PrairiesCan</li> <li>• National Quantum Strategy programs</li> <li>• Industry</li> </ul>	<ul style="list-style-type: none"> <li>• Canada Foundation for Innovation (infrastructure program stream)</li> <li>• Other Government of Alberta Ministries or Agencies</li> <li>• Alberta Innovates</li> <li>• Chair salaries</li> <li>• Faculty salaries</li> </ul>

## 7. Review Process

- Expressions of Interest must be submitted March 5, 2025
- Expressions of Interest will be reviewed by Quantum City
- After review, Quantum City will send out invites for Full Applications to eligible candidates

- Full Applications must be submitted April 30, 2025
- Full Applications will be reviewed by external peer reviewers
- Final decisions will be released late July 2025

## 8. Explanation of terms

Project plan	<ul style="list-style-type: none"> <li>• Sequence and dependencies of activities</li> <li>• Resources and activities needed to achieve the anticipated results</li> <li>• Risks and description of a mitigation plan for the project</li> <li>• Timelines for the activities to lead to milestones and deliverables using a Gantt chart, table or diagram</li> <li>• Implementation of equity, diversity, and inclusion (EDI) processes</li> </ul>
Work package	<ul style="list-style-type: none"> <li>• Objective(s)</li> <li>• Risks and mitigation</li> <li>• Milestones</li> <li>• Deliverables</li> <li>• Timeline</li> </ul>
Training plan	<ul style="list-style-type: none"> <li>• Objective(s)</li> <li>• Activities</li> <li>• Required resources</li> <li>• Best practices in EDI in the recruitment of HQP</li> <li>• Skills</li> <li>• Examples of professional skills include leadership, communication, collaboration. Other examples can be found <a href="#">here</a>.</li> </ul>
Equity, Diversity, and Inclusion (EDI)	See <a href="#">here</a> for NSERC guidance.
Solution Readiness Levels (SRL)	<p>Solution Readiness Levels (as outlined by the Innovation for Defence Excellence and Security (IDEaS) program. <a href="#">Click here</a> for more information.</p> <p><b>This call for proposals will advance proposed solutions from Solution Readiness Levels (SRL) 3-7 inclusively.</b> The SRL is a scale from 1 to 9 used to define the level of maturity of a research project. The SRL are defined as follows:</p> <p>SRL 1: Identification and observation of basic principles and properties.  SRL 2: Definitions of practical applications. Formulation of concepts.  <b>SRL 3: Observation and analysis through analytical research, laboratory research or experiments.</b>  <b>SRL 4: Proof of concept that is based upon the integration of applications and concepts to demonstrate viability.</b>  <b>SRL 5: Validation defined as the refined integration of applications or concepts to confirm validity.</b>  <b>SRL 6: Simulated demonstration of a near-end state solution and testing in a simulated environment.</b>  <b>SRL 7: Real-world demonstration of a near-end state solution and testing in an appropriate real-world environment.</b></p>

	<p>SRL 8: Qualified solution which is the completion of end state solution and refinement through testing.</p> <p>SRL 9: Proven solution that is based upon final solution implementation and success.</p>
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### Glossary

Co-investigator	Member of a research group applying for a team grant. May lead some of the proposed research/activities.
Collaborator	<p>Collaborators may take part in a research team but will not have access to grant funds. Must be qualified to undertake research independently and will be expected to contribute to the overall intellectual direction of the research project or program of research. Refer to specific funding opportunities for detailed eligibility requirements.</p> <p>Collaborators are considered team members and should be included.</p> <p>Collaborators are not mandatory for this project application.</p>
Partner organization	<p>The partner organization must play an active role in the project and make in-kind or cash contributions through at least one of the following roles:</p> <ul style="list-style-type: none"> <li>• Active participation in project research activities</li> <li>• Application of project research results to help achieve the desired outcomes</li> <li>• Active participation in translating or mobilizing the knowledge produced by the project to generate the greatest possible economic, social and/or environmental benefits for Alberta</li> </ul> <p>Partner organizations are not mandatory for this project application.</p>
Principal investigator	The principal investigator on an application, leads the direction of the proposed research/activities, as well as coordinates the financial and administrative aspects of the application and grant.
Research trainees (HQP)	<ul style="list-style-type: none"> <li>• Undergraduate student</li> <li>• Graduate student</li> <li>• Postdoctoral associate</li> </ul>
SMART	<ul style="list-style-type: none"> <li>• Specific</li> <li>• Measurable</li> <li>• Achievable</li> <li>• Relevant</li> <li>• Time-bound</li> </ul>

### 9. Timeline

Expression of Interest deadline	March 5, 2025
Full Application deadline	April 30, 2025
Final decisions	Late July 2025

## Contact Information

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