**Application**

**Quantum Quest Seed Fund Round 5**

Please refer to the Quantum Quest Seed Fund Guidelines available at [tqt.uwaterloo.ca](http://tqt.uwaterloo.ca/opportunities/quantum-seed/).

For joint CFREF project applications, unless otherwise indicated below, please detail only the UW-based activities of the research project. Note that application details may be shared with the partner institution to assist with the approval process.

**Definitions**

**Collaborators:** Faculty and/or researchers internal or external to the university who contribute to the project, and are not Principal Investigators at one of the other two quantum CFREF programs for the purposes of a joint project.

**Co-Principal Investigator:** PI at one of the other two quantum CFREF programs who will lead joint activities at their instiution as per joint project defined herein.

**Joint Project:** Seed fund project with other quantum program(s) supported by CFREF (UW TQT, [Sherbrooke Institut Quantique](https://www.usherbrooke.ca/iq/en/) and [UBC Stewart Blusson Quantum Matters Institute](https://qmi.ubc.ca/)).

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| 1. Principal Investigator |  |
| 2. Department |  |
| 3. Email |  |
| 4. Collaborators (name and institutional affiliation), if applicable |  |
| 5. Project Title |  |
| 6. Joint Project | Yes  No |
| 7. Co-PI on joint project (name and institutional affiliation), if applicable |  |
| 8. Grand Challenge | Quantum Computer Quantum Sensors  Quantum Communication Other  (If more than one applies then indicate the primary challenge area) |
| 9. Thesis Statement |  |

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| 10. Abstract: In two (2) pages maximum describe the research proposal including references. The proposal should address such aspects as connection to quantum, motivation, novelty, comparison to state-of-the-art alternatives, and methodology, as appropriate. For joint research projects, include a description of the joint activities for a maximum of two and a half (2.5) pages for the research proposal. |
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| 11. For joint projects only, briefly describe the rationale for a joint project and what additional benefit(s) you hope to achieve through a joint collaboration. |
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| 12. Describe the connection of your project to the Grand Challenge selected above. If “Other” then describe how your research advances new ideas/applications for quantum devices. |
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| 13. Describe the applicability of the applicant and research team to the project (i.e., why are you and your team the right individuals to address this research project?). |
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| 14. Identify the milestones of your project according to the timelines indicated. | |
| 6 Months |  |
| 12 Months |  |
| 18 Months |  |
| 2 Years |  |

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| 15. What is the potential for IP and/or commercialization? |
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| 16. Identify early adopters if possible. |
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| 17. Describe the societal impact of your project (to Canada and globally). |
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| 18. Describe the Science/Engineering/Quantum Information Processing impact of your project. |
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| 19. Describe any plans to make hiring and training opportunities available to members of designated groups (women, visible minorities, Aboriginal people and persons with disabilities). |
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| 20. Is the proposed project a new activity (i.e., not a continuation of your current activities)? If yes, what is your plan for seeking additional funding, as appropriate, beyond the term of the seed funding? |
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**21. Highly Qualified Personnel**

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| HQP – Please ensure [NSERC 100](http://www.nserc-crsng.gc.ca/OnlineServices-ServicesEnLigne/pdf/F100D_e.pdf) form Appendix D (Consent form) is complete for each person | |
| Name or TBD |  |
| Level | PDF PhD Masters Undergraduate |
| Department |  |
| Role |  |
| Other Funding Sources (if applicable) |  |

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| Name or TBD |  |
| Level | PDF PhD Masters Undergraduate |
| Department |  |
| Role |  |
| Other Funding Sources (if applicable) |  |

**22. Budget Justification**

Provide justification for your budget. Identify budget items by noting the accompanying Excel spreadsheet row number relevant to the item. Budget expenditures should follow the [Tri-Agency Financial Guidelines](http://www.nserc-crsng.gc.ca/professors-professeurs/financialadminguide-guideadminfinancier/index_eng.asp).

For joint projects, budgets may include PI or HQP travel to the joint institution for collaboration. It is expected that each institituion will cover the costs of travel and other research expenses for their own personnel and activities.