

WICKED IDEAS COMPETITION #2

DEADLINES

Notice of Intent Deadline: January 6, 2021 Full Applications Deadline: February 12, 2021 Presentation/Pitch of Wicked Idea: End of March 2021

Terms of Reference

The *Wicked Ideas* Competition is a Vice-Principal (Research) initiative to fund and support research collaboration and excellence.

Wicked Problems are issues so complex and dependent on so many factors that it is hard to grasp what exactly the problem is, or how to tackle it. *Wicked Ideas* are needed to solve these problems, and demand the input of multiple disciplines with relevant practical expertise. This competition will fund *Wicked Ideas* that respond to local, national and global challenges, by supporting the formation of research teams that offer the expertise and perspectives needed to tackle them.

The Competition

A key strategic goal of this competition is to support and strengthen opportunities for teams of researchers at Queen's to successfully compete in the <u>New Frontiers in Research Fund</u> (NFRF) suite of programs. To date, Queen's has had outstanding success in the NFRF programs, and *Wicked Ideas* will continue to assist in positioning Queen's researchers for success in future competitions. The parameters of the program align with NFRF criteria:

[To] support high risk, high reward and interdisciplinary research that is not easily supported through funding opportunities currently offered by the three agencies. It seeks to inspire projects that bring disciplines together beyond traditional disciplinary or common interdisciplinary approaches. The challenge may be fundamental, leading to a scientific breakthrough, or applied, with a social, economic, environmental or health impact.

This competition will have two streams:

- 1) An *Interdisciplinary Stream* where team members will be collaborators from multiple disciplines. A minimum of 10 teams will be funded within this stream.
- 2) A *Discipline Specific Stream* where team members can be collaborators from within a given discipline. A maximum of five teams will be funded within this stream.

Teams

The competition is open to all Queen's faculty members (tenured, tenure-track or clinicians with protected research time) across all disciplines. Each team must be led by two co-investigators one of whom must be an early career researcher, defined as those who are within 10 years of their first academic appointment. In addition, co-investigators must hold Tri-Council funding or have applied for Tri-Council funding within the last two years. This requirement does not apply to *team members*. Team members may be external to Queen's University and can include adjuncts, research associates, students, post-doctoral fellows, community partners, etc. Teams will be asked to identify whether they are applying in Stream 1 or 2. Different parameters are required for each stream. Faculty members are limited to applying as a co-investigator to one team; faculty can be team members on a maximum of two proposals.

Interdisciplinary Stream

Each team must be led by two co-investigators one of whom must be an early career researcher, defined as those who are within 10 years of their first academic appointment. The co-investigators must represent a minimum of two discipline areas (i.e., Fields of Research), as defined by a highest group-level classification based on the <u>Canadian Research and Development Classification</u>.

Discipline Specific Stream

Each team must be led by two co-investigators, one of whom must be an early career researcher, defined as those who are within 10 years of their first academic appointment. Co-investigators must declare the discipline area (i.e., Fields of Research), as defined by a highest group-level classification based on the <u>Canadian Research and Development Classification</u>, and justify why this group brings disciplines together beyond traditional disciplinary or common interdisciplinary approaches that cannot be funded within standard tri-agency programs.

Funding Details

- Up to 15 teams will be awarded \$75,000 each in the first phase of the competition in spring 2021.
 - \circ A minimum of 10 teams will be funded within the Interdisciplinary Stream
 - $\circ~$ A maximum of five teams will be funded within the Discipline Specific Stream
- The 15 teams will be eligible to compete for one of an additional five (maximum) awards of \$150,000 (maximum) in a second phase of funding.
 - Assessment criteria for second phase funding will be provided by the teams themselves in their initial application, and these metrics will be used to assess the success of team in the first phase of the competition.

Application Process

The application will include three stages:

Notice of Intent

Interested applicants will need to submit a Notice of Intent (NOI) by January 6, 2021. The NOI will not be adjudicated, but will assist in the establishment of review panels for the full applications.

NOI applicants will receive an invitation to complete the University Equity Survey to assist with integration of Equity, Diversity and Inclusion considerations into our internal funding programs.

Full Application (4 pages for proposal, 1 page budget (brief summary), 2 page CV for each co-investigator and each team member)

The full applications will be adjudicated based on the following criteria:

- Research excellence
- Training and development of Highly Qualified Personnel
- Knowledge Mobilization activity
- High risk, defined by elements such as:
 - defying current research paradigms;
 - o proposing unique scientific directions; and/or
 - bringing new disciplines together with different perspectives to use novel approaches for solving existing problems.
- High reward, defined by elements such as:
 - \circ $\;$ the degree of impact and the size of the community affected;
 - significantly advancing current knowledge, methods and/or technologies;
 - o resolving a longstanding scientific issue; and
 - \circ $\;$ transforming and/or disrupting conventional thinking.

Applicants are to prepare a project proposal that includes the following:

- Applicants will be asked to provide an overview of the idea including why it is high risk, innovative and could lead to a breakthrough.
- Applicants will be asked to provide a description of potential knowledge mobilization outcomes, including impact on community and the development of relationships with other partners, including government, industry and the not-for profit sector.
- Applicants will be asked to propose a maximum of five metrics that will be used to evaluate success of the project should funding be available for a second phase.
- Applicants will be asked to include a summary of the proposed use for the initial \$75,000 in funding; there is no particular restriction on the nature of the activities except that they must conform to University policies on research eligible expenses.
- The full applications will be adjudicated by the appropriate multi-disciplinary/disciplinary research review panels, which will recommend to the Vice-Principal (Research) the applications which should advance to the next application stage. The Vice-Principal (Research) will make the final determination which applications will advance.

Pitch Adjudication Panel

Selected teams will be invited to present/pitch to an adjudication panel in March 2021. The adjudication panel will include faculty researchers, community members, industry and other partners.

A presentation template for the key areas to be addressed in the presentation will be provided, and will include the following:

- Overview of idea
- Why the team can be successful (no CVs; need to communicate to adjudication panel the strength of the team)
- Why the team cannot get funding from other programs
- Overview of team's proposed metrics, highlighting those metrics to be used to assess their project

Applicants will be asked to present and take questions from the adjudication panel. Further details will be provided to the selected teams prior to the presentation/pitch.

Following the presentations/pitch, the adjudication panel will provide ranked recommendations to the Vice-Principal (Research) of the teams that should be funded. The Vice-Principal (Research) will make the final decisions.

Successful projects:

Successful projects will begin in April 2021 with spending to commence no later than September 2021, and be completed by April 2023. The 15 teams will be eligible to compete for one of an additional five (maximum) awards of \$150,000 (maximum) in spring 2022.

Questions can be directed to <u>research@queensu.ca</u>.