

NSERC invites the input of your Organisation to help identify the next Discovery Frontier theme.

Objectives

Discovery Frontiers (DF) grants are initiatives that identify and capitalize on emerging opportunities where Canada can benefit from its world-class capacity to take a leadership role in key areas of research and innovation. Discovery Frontiers address national research priorities and global challenges by supporting a small number of major new transformative and integrative activities. These initiatives will generate substantial impact from a one-time injection of funding for a defined period, addressing challenges and seizing leadership opportunities in areas of national importance.

The Discovery Frontiers initiative will bring together groups of researchers in new ways to address a major research challenge. The groups will incorporate new and emerging ideas, and combine their complementary expertise to conduct transformative, paradigm-changing research.

Description

Discovery Frontiers grants support a limited number of large international activities, opportunities or projects that are of high priority in the context of advanced research in Canada. These will be led by world-class Canadian researchers and will comprise teams that will generate substantial impact for the benefit of Canada.

There is no annual competition cycle. Calls for proposals will be issued periodically by Natural Sciences and Engineering Research Council of Canada (NSERC). A limited number of proposals for large undertakings with a high level of impact and visibility will be accepted in each competition. Proposals should be for concerted, broad-based, collaborative efforts and not individual research projects.

Suitable initiatives include:

- high risk/high pay-off activities;
- transformative/disruptive, paradigm-shifting research; new strategies to tackle an important problem of broad interest;
- research that opens new fields or integrates existing fields in new ways;
- research that accelerates the establishment of expertise and capacity that is in demand; and
- research that provides solutions and breaks down barriers at the forefront of significant scientific problems and research questions.

Future areas of research for DF grants will be determined by NSERC, with advice from its Committee on Discovery Research. The process will emphasize the flexibility to respond to new opportunities as they arise.

Eligibility

In addition to the usual NSERC eligibility criteria for applicants and co-applicants, each Call for Proposals may identify mandatory eligibility criteria specific to that call. These will be used to screen applications and are pre-requisites for proposals to be accepted, at the Letter of Intent stage, within a specific Discovery Frontiers competition. Discovery Frontiers grants are not tied to the annual Discovery Grants (DG) competition cycle. Grants awarded under the Discovery Frontiers initiative can be held concurrently with an individual or a team DG. A DF grant must add value, building on excellence.

The following criteria will apply to all DF applications:

- The activity will encompass discovery research and must involve international collaboration; it can involve industrial or receptor sector participation capacity, if appropriate.
- The activity should encourage collaboration and integration across several disciplines within the natural sciences and engineering (NSE) and may include aspects of social science and health research.
- The activity will be distinct from, and will not duplicate, what is being done through other existing NSERC programs such as, but not limited to, the Discovery Accelerator Supplements, CREATE, Strategic Networks or Networks of Centres of Excellence programs.
- The proposal should demonstrate that the one-time research contribution has the potential to generate substantial and important advances in knowledge.

There may be additional criteria depending on the goals of a specific Discovery Frontiers competition (e.g., collaborative, multidisciplinary, industrial or receptor sector participation).

When presenting your Discovery Frontier theme please use the following headings:

Topic / Area / Activity	Describe the Opportunity (maximum 250 words)	Benefits (maximum 250 words)	Challenges (maximum 250 words)