



TO: Principals, Deans, Academic Directors and Chairs
FROM: Meric Gertler
DATE: November 20, 2014
RE: U of T Expressions of Interest in the Canada First Research Excellence Program (CFREF)

I wrote to Principals and Deans on November 7th ([PD-L] #4 - attached) regarding the CFREF program and calling for internal Expressions of Interest (EOIs) by November 17th. We received a number of very promising ideas. However, in the interest of ensuring that we consider all potential opportunities to support research of truly exceptional international calibre, we now wish to bring this call for EOIs to the attention of the full PDAD&C group. We are therefore extending the **deadline for EOIs to November 24th** and inviting you to consult with your colleagues on research areas that align with the broad objectives of the CFREF program including: translating an area of research excellence into a global leadership position, attracting and retaining top talent; and rendering economic and other benefits for Canada. Please provide your EOI in the form of an email to j.chadwick@utoronto.ca indicating the research area proposed and the academic division(s) that will be involved.

The next step in our institutional process – while we wait for the Federal government to release the program details – is the development of expanded descriptions described in Notices of Intent (NOIs). The originally proposed internal **deadline for NOIs has been extended to December 8th**. To assist in the development of these NOIs, we are proposing to convene a working session, tentatively proposed for the morning of Thursday, November 27th, at which representatives of each EOI will share information on their proposals and clarify opportunities for collaboration or differentiation, as well as receive constructive comment that would strengthen the proposed submissions.

We will be in touch with the EOI contacts and/or the Vice-Deans/Principals Research to confirm the exact time and location of the working session. If your academic division/unit is not currently identified as an EOI lead, but you would like to attend the working session, please send the name and email contact information of your proposed representative to j.chadwick@utoronto.ca and we will be sure to convey the meeting time/location.

The ultimate selection from amongst the NOIs of thematic areas that can be developed for submission to the national level process will be undertaken by a small group of advisors who possess broad knowledge of the national and international research and innovation landscape. Your recommendations for suitable individuals, from inside or outside the U of T, who are not participants on any of the emerging NOIs, would be most welcome.

We look forward to working with you and your colleagues in identifying and developing CFREF proposals that will reflect the world leading strength of the relevant U of T research area(s) and the potential for transformative impact.



P&D#4, 2014-15

TO: Principals and Deans
cc: Vice-Principals/Deans, Research or Equivalent

FROM: Meric Gertler, President

DATE: November 7, 2014

RE: U of T Engagement in the Canada First Research Excellence Program (CFREF)

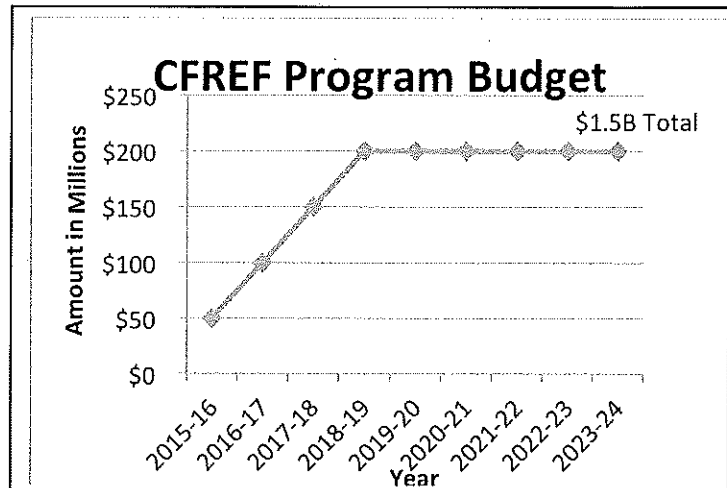
I am writing to communicate the process by which the University of Toronto will select and develop an application or applications to the Canada First Research Excellence Program (CFREF). Although the official call and attendant details for CFREF have yet to be released by the federal government, we understand that this program has the potential to bring some of the largest ever allocation of federal funds to discrete areas of internationally competitive research and innovation excellence in selected Canadian postsecondary institutions. Given the magnitude of this opportunity and the expectations regarding tight program timelines, we wish to engage you now in the identification of thematic areas in which the U of T can demonstrate international level excellence and an ability to address fully the CFREF objectives.

We are seeking expressions of interest by **November 17, 2014** and completed Notice of Intent templates by **December 1, 2014**. Further detail is provided below.

CFREF Context

In February of this year, the Government released the 2014 Federal Budget. The budget positions post-secondary research within the Government’s Science, Technology and Innovation strategy development as a production system for new ideas and products to fuel businesses and raise the standard of living for Canadians.

The 2014 budget announced a \$1.5B, 10-year funding commitment for CFREF, ramping up over 4 years from \$50M to a steady state \$200M/annum out to 2023-24 “to help Canada’s post-secondary institutions excel globally in research areas that create long-term economic advantages for Canada”. The CFREF excerpt from the Budget is attached as Appendix 1.



Key phrases in Budget 2014 regarding CFREF's role in securing international leadership in science and innovation include:

- *Leverage key strengths* into world-leading capabilities
- *Advance global research leadership* of Canadian institutions
- Position Canada's post-secondary institutions to compete with the best in the world for talent and breakthrough discoveries, creating *long-term economic advantages* for Canada

CFREF Program Specifics

Although federal government consultations and discussions have been ongoing since the February budget, CFREF operational specifics have not yet been released. We expect a formal Call very shortly, but with a very short timeline to the submission deadline. The best information available to date suggests that CFREF will:

- be open to all post-secondary institutions on a competitive, peer-reviewed basis
- have an application deadline in early 2015, with decisions and cash flow by March 2016
- accept a limited number of submissions, likely only one, per institution (though it is possible that each submission may encompass multiple elements representing compatible research themes)
- make awards of up to \$30M/year per institution for 5-7 years

Additional information taken from the June 2014 AUCC submission to CFREF consultations is attached in Appendix 2.

U of T Proposal Selection Process

Given the expectation of a limited number of large awards through CFREF and, therefore, strict constraints on the number of proposals per institution, the University of Toronto must identify a small number of areas of world class research competitiveness that also address the program criteria and from which we can confidently select one or more to be developed into a highly compelling full proposal(s) for submission to Ottawa.

Academic divisions that wish to participate in this competition must take into account that in this program the bar will be set *very high*. This is not an opportunity to explore the potential of newly emerging areas of research and innovation promise. Instead, the focus is clearly on well established areas of particular U of T strength that, through additional significant and strategic investment, will become world-leading – or enhance their already established global leadership position – while at the same time addressing the program objectives. We expect that such proposals will naturally involve our most highly acclaimed scholars, and will showcase expertise from across the disciplinary and divisional spectrum. Such proposals will take account of important existing or potential partnerships with our affiliated hospitals, other Canadian institutions (where appropriate), peer institutions globally and key research partners in the private and not-for-profit sectors.

Applying for and, if awarded, managing a CFREF award will be a major undertaking, and will require the dedicated attention of divisional and research leaders now and over several years. However, the transformational potential of this level of funding is enormous. If your division is interesting in developing a proposal for internal review, please notify Judith Chadwick, Assistant Vice-President, Research Services (j.chadwick@utoronto.ca) at the earliest opportunity and no later than **November 17, 2014**. Please provide the research area proposed, and the academic divisions that will be involved in the proposal.

In addition, we have developed a NOI template (see [Appendix 3](#)) that is to be completed and submitted to the same address no later than **December 1, 2014**. I will assemble an advisory panel to work with me in assessing the NOIs relative to the CFREF program criteria and identifying one or more to be developed, through the application of very focused time, energy and resources, into full (a) proposal(s) for the CFREF deadline (TBD).

Further information regarding the terms of the CFREF program will be released as soon as it becomes available. I look forward to discussing this initiative with you further at the November 13th P&D meeting.

Appendix 1: Excerpt from Federal Budget 2014

Chapter 3.2: Fostering Job Creation, Innovation and Trade

Supporting Advanced Research and Innovation

The development of new ideas and new products is key to Canada's future prosperity—it fuels the growth of small and large businesses and drives productivity improvements that raise the standard of living of Canadians. Canada remains the G-7 leader in research and development (R&D) expenditures in the higher education sector as a share of the economy.

The Government plays an important role in Canada's science, technology and innovation system. Since 2006, the Government has provided more than \$11 billion in new resources to support basic and applied research, talent development, research infrastructure, and innovative activities in the private sector, including more effectively aligning federal support for research with business needs.

To be successful in the highly competitive global economy, Canada must continue to improve its approach for developing high-quality, talented people, performing world-leading research and generating new breakthrough ideas. The Government has increased support for these activities in each year since 2006, including through the recession..... In 2013, this support exceeded \$3 billion for research in the post-secondary education sector alone.

Securing International Leadership in Science and Innovation

Economic Action Plan 2014 proposes to create the Canada First Research Excellence Fund with \$1.5 billion in funding over the next decade to help Canadian post-secondary institutions excel globally in research areas that create long-term economic advantages for Canada.

Federal investments in research and development have contributed significantly to Canada's strong performance in the fields of science and technology. But Canada cannot be complacent, as Canadian post-secondary institutions face significant competition from their counterparts in other countries for the best minds, partnership opportunities and breakthrough discoveries. Canada's ability to attract top research talent, innovators and enterprises requires its world-class institutions to be able to seize emerging opportunities and strategically advance their greatest strengths on the global stage.

Economic Action Plan 2014 proposes to create the Canada First Research Excellence Fund, which will help Canadian post-secondary research institutions leverage their key strengths into

world-leading capabilities that will generate benefits for Canadians. Economic Action Plan 2014 proposes to provide the Canada First Research Excellence Fund with \$50 million in 2015–16, growing to \$100 million in 2016–17, \$150 million in 2017–18, and reaching a steady-state level of \$200 million annually in 2018–19 and beyond. Within the next decade, the Canada First Research Excellence Fund will provide an additional \$1.5 billion to advance the global research leadership of Canadian institutions.

The Canada First Research Excellence Fund will position Canada’s post-secondary institutions to compete with the best in the world for talent and breakthrough discoveries, creating long-term economic advantages for Canada. The Canada First Research Excellence Fund, administered by the Social Sciences and Humanities Research Council on behalf of all the granting councils, will be available to all post-secondary institutions on a competitive, peer-reviewed basis. Further details on this initiative will be made available later this year.

Appendix 2: Excerpt from AUCC submission to the CFREF Consultation – June 2014

Pending release of the final competition details, the following thoughts put forward by AUCC during the advocacy period should provide guidance/ideas on expected accountability and measurement related to CFREF:

Accountability and performance measurement

In their drive to compete globally, universities accessing CFREF funding could be measured on their ability to improve their international standing, attract highly qualified personnel and better translate knowledge into the national and international marketplace. Success in these three pillars is critical to Canada's prosperity.

To access their CFREF allocation, each university could be required to identify areas where they can achieve a globally competitive advantage — either an existing strength that requires incremental support, or an emerging or new strength with which an institution believes it has the potential to compete globally. This focus recognizes that institutions cannot move every lever that measures global excellence. Rather, institutions could undertake a disciplined, systematic and strategic approach in focusing on areas, as well as on the relevant metrics, that will move specific excellence indicators, in order to improve their global standing. This approach would demand highly strategic investments and will nurture focused research clusters across the country. It would encourage collaboration that benefits universities, their regional partners and the private sector, including SMEs.

Three pillars for performance measurement

Institutions could be required to propose the specific metrics by which they would be judged, according to their use of the Fund. The selection and reporting of metrics – in aggregation – should clearly demonstrate an institution's growing prominence and impact on the world stage, or on their local community, and could include the following:

Pillar 1: Global Excellence

The following are examples – intended to provide a sample of the kind of metrics that could be used by individual institutions – of how individual institutions could measure the impact of the Fund in terms of global excellence:

- Increase in external funding received from international public and private sources (using a three-year rolling average).
- Increase in participation in significant international research alliances (e.g. international research networks; joint labs; joint centres of excellence). This measure is to track major initiatives, not typical professor-to-professor collaborations (using a rolling five-year average).
- Increase in the number of (a) highly cited faculty members; and (b) highly cited papers (using a rolling three-year average).

Pillar 2: Talent

The following are examples of how universities could measure the impact of the funding on talent attraction and retention:

- Increase the recruitment of top Canadian and international research graduate students and post-doctoral fellows (using a three-year rolling average).
- Recruit Canadian research graduate students holding external graduate scholarships or fellowships.
- Recruit international research graduate students (visa students) from international universities.
- Recruit international post-doctoral fellows (visa-holding) from international universities (measured by an increase in the proportion of our international post-doctoral fellows holding externally funded positions, including Banting Postdoctoral Fellowships and industry-funded awards).
- Increase the attraction and recruitment of outstanding professors (Canadian or international) who held faculty positions at international universities (using a five-year rolling average).

Pillar 3: Knowledge Translation

Universities could choose to make commitments in the area of knowledge translation, as exemplified by the following. These would be measured by individual universities compared to their previous successes in these areas, and not on a national basis:

- Increase the number of private-sector start-ups arising from research work done at the university, or created by recent graduates (within 10 years of graduation) (using a five-year rolling average)
- Increase the number of "experiential learning" opportunities outside the university (funded internships, coop placements, community service, and arts placements) for graduate students (using a three-year rolling average)
- Increase the number of research partnerships between the university and the social sector and the university and the private sector, with a separate accounting for engagement with small and medium enterprises (using a five-year rolling average)
- Increase the number of patents and licenses the university or collaborating companies file, based on partnered research (using a five-year rolling average).

Appendix 3:

Canada First Research Excellence Fund (CFREF)
University of Toronto – Notice of Intent
Due: 1 December 2014

Section A

Using up to 5 pages, describe the research area of University of Toronto competitive advantage for which a compelling CFREF application could be assembled. Describe the primary theme as well as any sub-themes in relation to the considerations and priorities set out in the 2014 Federal Budget. Present evidence regarding the University's strength in the proposed research area which may include:

- contributing disciplines, divisions and affiliates
- key researchers, including awards and honours (all named individuals must have agreed to the inclusion of their names)
- publications and citations
- graduate programs
- specialized research facilities
- existing budget support
- history of external funding, including peer reviewed research sponsorships and charitable contributions
- key partnerships within and across the public, private and not for profit sectors

Section B

Using up to 3 pages, describe the proposed level of investment within the parameters of the program, how the funds would be invested, and the anticipated impact of that funding in advancing the area (and sub-areas) of research *and in relation to the federal government's objectives* (which include economic impact and job creation), as well as how that impact will be measured. Include information on the potential for leveraging other sources of support and key partnerships in support of the proposal.

Section C

Using 1 page, describe the lead division's strategy for developing a highly competitive submission including the writing, advancement of collaborative partnerships and identification of leveraged funding. Recall that CFREF will be a high-profile, highly competitive program of the federal government through which a relatively small number of awards for tens of millions of dollars will be awarded. Proposal development and award management strategies should be designed accordingly.

Please submit your completed NOI to j.chadwick@utoronto.ca