2018 College-Industry Innovation Fund

CIIF Stream 1 - Tips for applicants

April 2018

CANADA FOUNDATION FOR INNOVATION INNOVATION.CA

Agenda

Historical perspective on CIIF submissions and success rates

Review process

Observations from CFI's administrative review

Observations from Reviewers

Questions

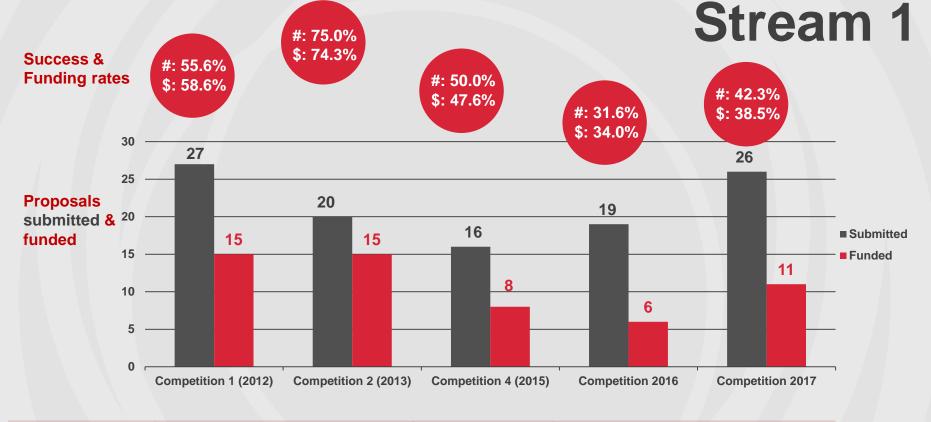
About the CIIF

Stream 1
CFI Infrastructure

Stream 2
NSERC CCI-IE + CFI

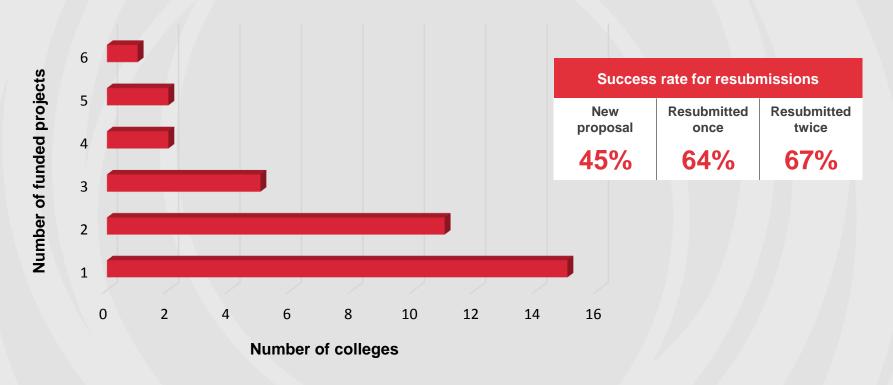
So far...\$64.3M for 72 projects

CIIF by the numbers



Total awarded:	\$13.3M	\$11.3M	\$6.3M	\$7M	\$10.7M
Average award:	\$680k	\$578k	\$613k	\$903k	\$750k
Average % Construction (if):	40%	16%	29%	32%	28%

Stream 1 & 2



Many Colleges have 1 funded project

Review Process

Review process



CFI administrative review



June-July: Expert committee – detailed review of 1-7 proposals by experts in the field, evaluate assessment criteria, 1h per proposal committee discussion, EC report written by CFI and approved by chair summarizes committee consensus



Sept/Oct: Multidisciplinary review – review of **all** proposals and EC reports, 15 min per proposal committee discussion, focus on competition objectives, funding recommendation, MAC report written by CFI and approved by chair



Nov: After Final decision by CFI Board – results communicated to colleges





Objectives vs. review criteria

Objective 1

Create and enhance college-industry partnerships leading to business innovation using industry-relevant, state-of-the-art research infrastructure.

Contribution to business innovation

Infrastructure

Objective 2

Build upon proven applied research capacity and a track record of partnerships with the private sector in an area of strategic priority to the institution.

Enhancing applied research capacity

Partnerships with the private sector

Objective 3

Generate socioeconomic benefits in the region and nationally including the development of highly skilled personnel.

Benefits to Canada

Observations from CFI's administrative review





One page summary

How does the proposal meet the competition objectives?



Proposal: mostly written for experts in field

Summary: use language for non-experts

intended for MAC



Compute Canada

Advanced research computing infrastructure



Consult with Compute Canada as outlined on its website: computecanada.ca



Infrastructure utilization



100% if

> primarily used for applied research & tech dev

with private-sector partners

> used for training purposes

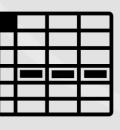
if training is articulated around applied research or technology development project aimed at business innovation



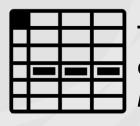
Contrib. from eligible partners

We encourage you to bundle all expected in-kind contributions from vendors into a single line.

Total in-kind Contributions from partners







Total in-kind portion of the *Costs of individual items*



Financial resources for O&M



You must explain estimated costs and sources of support provided in these tables. Do so in the "Infrastructure and budget justification" section of the "Assessment Criteria" attachment.



Floor plans (pdf attachment)



- Use for floor plans only.
- > Other information will be removed from the proposal.



Assessment criteria (pdf attachment)



- Each criterion contains a number of aspects that must be addressed in proposal.
 - Proposal will be weakened, if you don't address all the aspects.

Observations from Reviewers: A Qualitative Analysis



Top 6

43%

Stakeholder consultation insufficient

0,710

Past business outcomes not detailed

45%

Weak potential for innovation

O 65_%

Lack of detail for applied research

Partner contribution to research not detailed

<u>5</u>

83%

Infrastructure not well justified

The proposed applied research activities respond to well-identified needs of the private sector and have been developed in collaboration with key industrial partners to ensure they achieve the intended business innovation outcomes.

- 1. Outline the approach (e.g. stakeholder consultations) your college took to establish the needs of the private sector for the proposed applied research activities.
- 2. Identify key private-sector partners as well as the process used to select them.
- 3. Describe the applied research activities or projects that will be undertaken in partnership with the private sector. For each, include the following:
 - a. Specify the business needs the project addresses, its objectives and intended outcomes.
 - b. Describe the methodology that is considered to conduct the applied research activities.
 - c. Detail the contributions (e.g. time, financial, role) of the private-sector partners to the project.
- 4. Describe your business development and outreach plans to stimulate new partnerships.

Contribution to business innovation



- > Focus on your future plans and how they were determined.
 - ➤ Make sure your descriptions provide a sufficient level of detail for experts in the field who will judge of the feasibility of the activities.

Weaknesses identified by EC

Contribution to business innovation

65%	 Lack of detail for applied research activities 	17%	 Uniqueness of research program not addressed (other institutions doing similar research)
52%	Partner contribution to research activities not detailed	17%	•Lack of business plan
43%	•Stakeholder consultation not extensive/poorly described	17%	•Safety/regulatory concerns not explained
43%	•Weak potential for innovation	13%	•Missing details on location of infrastructure
26%	•Lack of focus/too broad	13%	•Engagement of partners questioned
22%	•No example of business innovation	13%	•Weak outreach strategy

identified by EC

identified by EC & MAC

The requested infrastructure plays an essential role in creating and enhancing collaborations with industrial partners. The infrastructure will be optimally used and maintained to ensure continued collaborations with, and relevance to, the partners.

- 1. Describe each item and justify why it is needed to conduct the proposed applied research activities. Use the item number, quantity, cost and location found in the "Cost of individual items" table. Provide a cost breakdown for any grouping of items. For construction or renovation, provide a description of the space including its location, size and nature.
- 2. Demonstrate how the infrastructure is industry-relevant and essential for creating and enhancing collaborations with private-sector partners.
- 3. Demonstrate the versatility of the requested infrastructure to respond to immediate and longer-term applied research needs of private-sector partners.
- 4. Indicate how the infrastructure will be efficiently used and maintained in the short term and sustained over the long term. Refer to the "financial resources for operation and maintenance" section.

Infrastructure

(including the budget justification)



Budget justification:

- Describe each item.
- Be sure to specify the item's main features.
- Reviewers evaluate the item's suitability for conducting the proposed activities using the methodology described.

Weaknesses identified by EC

Infrastructure

83%	•Infrastructure not well justified / not connected to applied research / wrong equipment	17%	•Governance/management structure lacking
30%	Availability of similar infrastructure	17%	 Infrastructure or data management/access plan
22%	•Budget imbalance relative to themes/projects	17%	•Infrastructure specifications not included
22%	•No expertise to use infrastructure	17%	•Limited user base
22%	•O&M needs/costs/revenues not detailed	17%	•Not enough equipment/budget too low/missing key equipment
17%	•Equipment not versatile to meet needs of industry	17%	•Not enough personnel for O&M

identified by EC

identified by EC & MAC

The proposal builds on the institution's proven applied research capacity and key investments in people and infrastructure in the area of strategic priority. Existing applied research capacity will be further enhanced by the requested infrastructure and associated institutional commitments.

- 1. Describe your college's current applied research capacity in this area of strategic priority, including:
 - a. the experience and expertise of key participants (from your college and from the private sector), administrative and business development personnel;
 - b. currently available equipment and research space; and
 - c. sources of financial support.
- 2. Describe how your college's existing applied research capacity will be enhanced by the requested infrastructure.
- 3. Specify your college's commitments in support of this proposal.

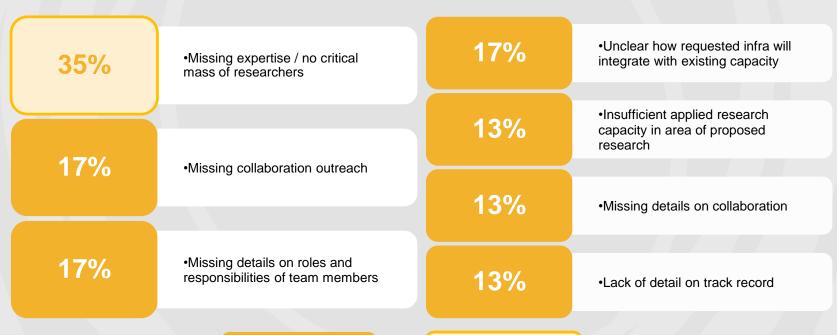
Enhancing applied research capacity



- # of key participants limited to eight, but other people can participate in project
 - Reviewers expect the roles and contributions of each participant to be clearly explained in the "Assessment Criteria" attachment of the proposal.

Weaknesses identified by EC

Enhancing applied research capacity



identified by EC

identified by EC & MAC

The college has demonstrated its ability to build and maintain productive partnerships with the private sector in the area of strategic priority.

- 1. Demonstrate your college's and research team's track record of establishing and maintaining partnerships with the private sector in the area.
- 2. Provide evidence of the business innovation outcomes enabled by these partnerships.

Partnerships with the private sector



- focus on your past and current track record of partnerships in the area of the proposal.
- ➤ future plans (enabled by the infrastructure you're requesting) should be described in the "Contribution to business innovation" section instead.

Weaknesses identified by EC

Partnerships with private sector



identified by EC

identified by EC & MAC

The proposed activities have the potential to lead to business innovation and socioeconomic benefits for the region and for Canada. The proposed activities will enable the development of highly skilled, qualified personnel.

- 1. Outline the anticipated benefits of the applied research activities and the potential impacts on the private sector (and other sectors as applicable).
- 2. Specify the timeframe over which these are expected to occur.
- 3. Specify the anticipated number of highly qualified personnel (HQP) and describe the plans to involve them in applied research activities (e.g. co-op projects, summer students).
- 4. Describe the skills HQP will acquire through engagement with private-sector partners in the applied research activities using the requested infrastructure.

Yellow: slightly changed from 2017

Benefits to Canada



Focus on medium and longer-term impacts of the proposed activities beyond the business innovation outcomes described in the "Contribution to business innovation" section.

Weaknesses identified by EC

Benefits



identified by EC

identified by EC & MAC



Weaknesses identified by MAC

Objective 1

61%

Infrastructure not well justified

57%

Low Partnership / missing strategic partner engagement plan

48%

Lack of detail for applied research activities

39%

Weak potential for innovation

39%

Too broad, lacking focus

22%

Partner contribution/relation to research activities not detailed

17%

Infrastructure sustainability / O+M planning missing

17%

Safety/regulatory/ethics concerns

17%

Unclear how new infrastructure will complement existing infrastructure

13%

Industry need not demonstrated

13%

Insufficient applied research projects planned

Objective 2

39%

Missing expertise on team

26%

Existing capacity unclear

22%

Weak track record of applied research in this domain

17%

Lack of detail for past outcomes

17%

Lack of detail for past partnerships

Objective 3

43%

Outcomes for industry not detailed

26%

Missing details of benefits

26%

Unclear pathway to benefits

13%

HQP details missing

Keep in touch







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