CFI IF Information Session Agenda

1. **Competition Context**
   Vivek Goel, Vice-President, Research and Innovation
   Judith Chadwick, AVP, Research Services
2. **Budget Section**
   Elizabeth Nguyen, Research Funding Officer, RSO
3. **Editorial Tips**
   Lee Slinger, Editorial Officer, RSO
4. **Insights from a CFI Applicant**
   Peter Krieger, Professor, Physics
5. **Q & A**

CFI Innovation Fund 2019

- CFI is currently undertaking a national consultation as a result of the 2018 Federal budget allocation
- The anticipated Call for Proposals for the 2019 IF has not yet been released
- UofT is proceeding with internal proposal identification processes to ensure we are ready for the 2019 IF competition, and to co-ordinate with other institutions across the country

CFI Innovation Fund Context

- Federal Budget 2018 established a more stable budget for CFI
- Expectation of regular, predictable Innovation Fund competitions
- Better planning horizon – move on initiatives that are ready in the near term, while staging earlier stage priorities for subsequent competitions
- Considerations regarding Ontario matching funding

U of T Institutional Approach

Excellence-based, peer-reviewed approach informed by strategic priorities

- Step 1: call for expressions of interest, vetted by academic divisions
- Step 2: review EOIs for synergies across divisions and, where applicable, with hospitals
- Step 3: pre-proposals prioritized through internal peer review

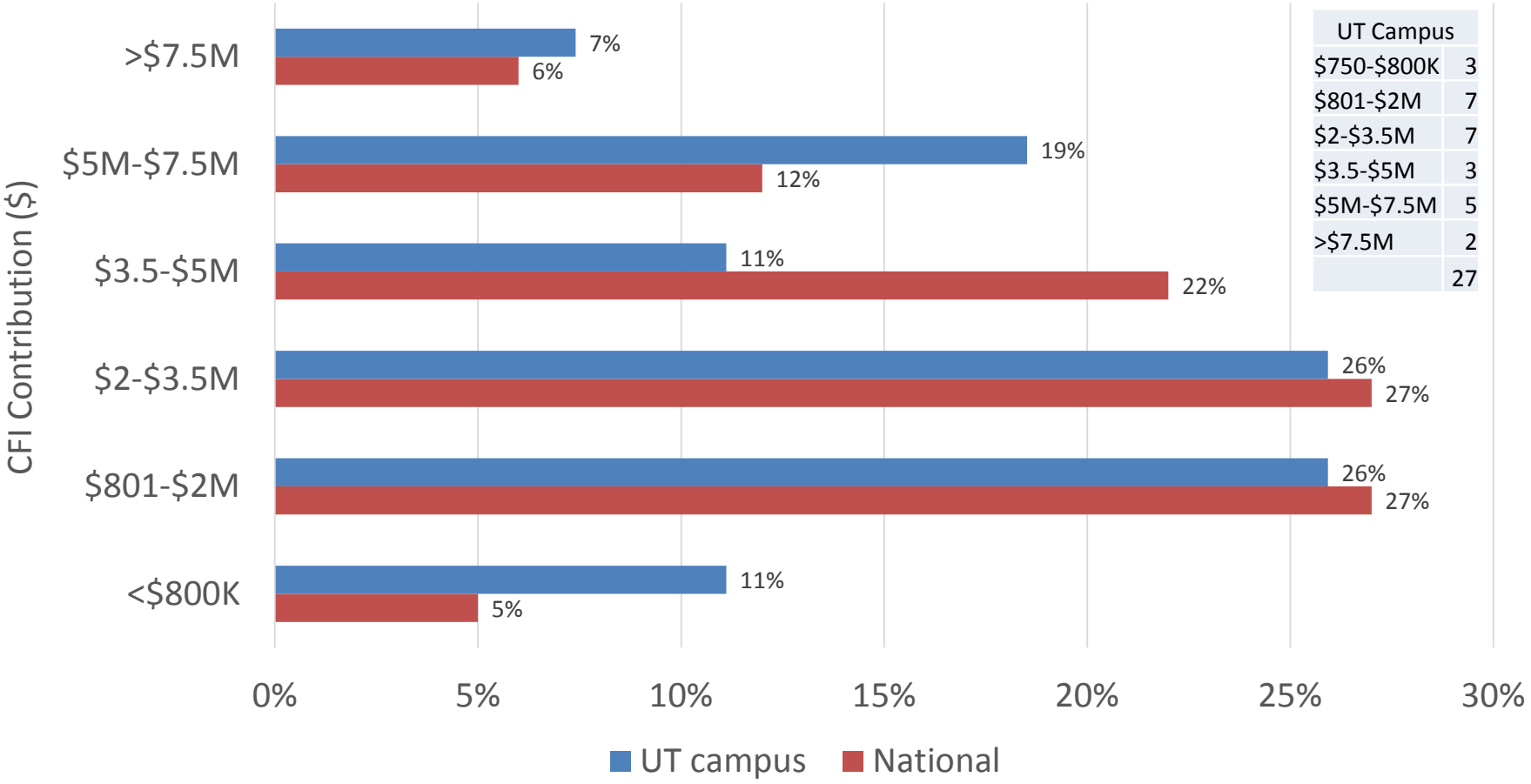
UT Campus Success

The excellence of our researchers combined by our approach has led to success (based on $ awarded):

- 2008 – 49% success rate vs. 34% nationally
- 2012 – 66% success rate vs. 36% nationally
- 2015 – 20% success rate vs. 33% nationally
- 2017 – 45% success rate vs. 35% nationally

2017 IF Application Distribution

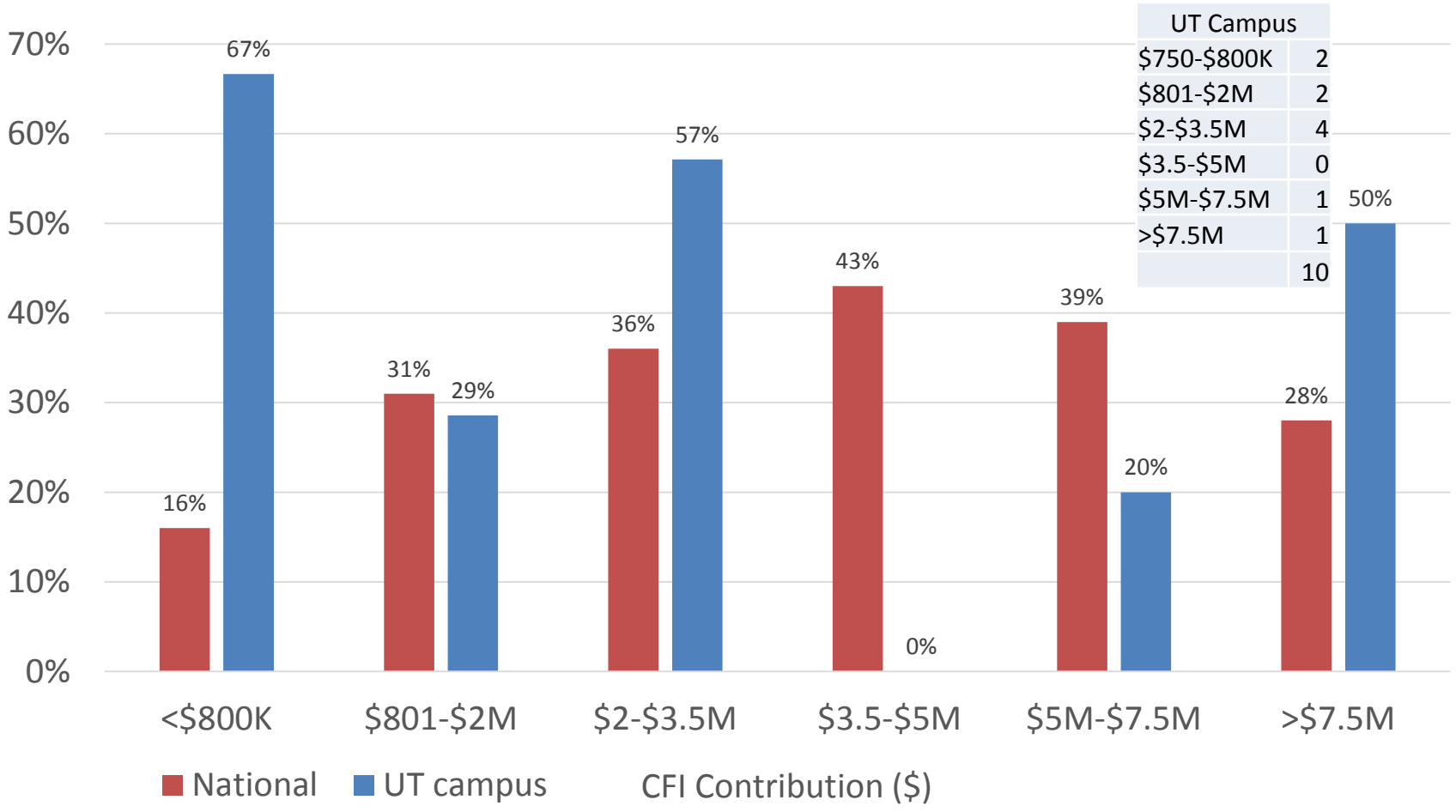
National: 351 applications UT campus: 27 applications



UT Campus	
$750-$800K	3
$801-$2M	7
$2-$3.5M	7
$3.5-$5M	3
$5M-$7.5M	5
>$7.5M	2
	27

2017 IF Success Rate

National 117 funded, UT campus 10 funded



UT Campus	
$750-$800K	2
$801-$2M	2
$2-$3.5M	4
$3.5-$5M	0
$5M-$7.5M	1
>$7.5M	1
	10

Estimates for 2019….

- Estimate is that CFI will allocate **$325M** to this round (2017 $425M; 2015 $250M; 2012 $166M)
- Plus Infrastructure Operating Funds @30% ($97.5M to support O&M of awarded infrastructure)
- UT campus "ask envelope" estimated at **$67M** (15% of 2.75 X national competition allocation, shared with hospitals)
- a 35% success would render **~$22M** for proposals led by campus-based Project Leaders

Continuing Assumptions based on 2017

- Emphasis on collaboration (institutional and, where appropriate, regional, national or international)
- new construction (to house infrastructure) is eligible
- minimum ask (Total Project Cost) increased to $750K (or $300K from CFI) up from $500K
- potential for F2F for projects with CFI ask over $8M
- adjudication criteria not significantly different

2019 Competition – Tentative Timelines

Your Support Team

Sara-Jo Pipher

- General inquiries (rso.vpr@utoronto.ca)

Elizabeth Nguyen

- Policy and budget guidelines (ec.nguyen@utoronto.ca)

MayLiza Baak

- Process, timelines, eligibility (m.baak@utoronto.ca)

Sonya Brijbassi, Colin Swift

- Technology development (s.brijbassi@utoronto.ca, colin.swift@utoronto.ca)

Gabrielle Sugar and **Lee Slinger**

- Editorial feedback (for final proposals to CFI and ORF)

Budget Considerations

Total cost = 40% CFI + 40% ORF + 20% other

Budget Considerations

Myths about the 20%

- CFI does not dictate that it has to be in kind through vendor deep discounts, their criteria is that they will provide up to 40% of the total cost
- Divisional cash contributions are eligible (e.g., if renovations are planned already, and will house the equipment, they may be able to be utilized as part of the 20% matching
- Partner/third party cash contributions are eligible (but rare)
- Tri-agency funds are not an eligible match

Budget Considerations

1. **Consult the CFI Policy and Program Guide re eligiblility**
   - See section 4.6 (pages 13–18) https://www.innovation.ca/awards/policy-and-program-guide-and-supplemental-information

2. **Official quotes not necessary at this time, however,**
   - It is important to create a realistic budget
   - Costs should be based on a reliable source (e.g., verbal quotes, previous recent purchase, etc.)
   - Total cost and CFI ask cannot change after pre-proposal

3. **Include full cost of item**
   - Ensure that the item cost includes any vendor deep discount (over educational discount), 3.41% tax, shipping, brokerage fees, etc.
   - Build in FOREX, e.g. USD @ 1.4x

Budget Considerations

List Price	81,800
Educational Discount @ 5%	4,090
Net Educational Price	77,710
CFI Discount (In-Kind) @ 20%	**16,360**
Net Cash Price	61,350
Add shipping/brokerage	2,000
Add taxes @ 3.41%	2,092
Cash total	65,442

Cash (CFI, ORF, Institution) @ 80%	65,442
In Kind @ 20%	16,360
Total Eligible Cost (= Fair Market value)	81,802

Total Eligible Cost (FMV)	81,802
CFI @ 40%	32,721
ORF @ 40%	32,721
In kind 20%	16,360

Budget Considerations

4. Equipment or components that physically connect or work together should be grouped into "systems"

- Provide detail in the Infrastructure section description

5. Number of items

- Enter the number of major equipment items in the line item (e.g., 3 microscopes)
- Do not enter the number of component parts that comprise a system or major equipment item

Construction/Renovation

Include details of the renovation

- Ensure you meet with your respective divisional/department space and planning representatives to determine appropriate cost, location, etc. well in advance
- Describe the space and type of work
- Include direct costs, soft costs and contingency costs
- Timeline for start, expected completion, and occupancy dates
- Floor plan and space layout of each room

Specify the full cost to renovate the space

- Consider separate costing at the onset for renovation that is part of a larger undertaking as it will be easier to report on the cost later

Consultation with Compute Canada

- CFI has invested significantly in computing infrastructure, and expects consultation to take place with CC for any proposed new computing resources, falling within their "HPC" ($100K) definition.
- This need take place only after our internal competition.
- Stay tune for changes on the federal advanced research computing environment.

compute • calcul CANADA

Infrastructure Operating Fund (IOF)

- Each successful CFI award comes with an Infrastructure Operating Fund (IOF) award equal to 30% of the CFI award
- IOF funds are for operational and maintenance (O&M) costs to keep the CFI-funded infrastructure in "research-ready mode"
- IOF is under divisional purview and is allocated on a case by case basis – speak to your Chair and/or Vice-Dean/Vice-Principal
- Take account of this in the Sustainability section to include these funds as supporting the O&M costs

CFI Innovation Fund 2019 Editorial Tips

* Based on Innovation Fund guidelines from 2017 competition.

Pre-Proposal Overview (Internal)

- Project Information Form
- Project Summary (1p)
- Assessment Criteria (17pp. max)
  I. Institutional Capacity and Track Record (up to 2p)
  II. Research or Technology Development (up to 3p)
  III. Team (up to 2p + a table)
  IV. Infrastructure with Budget Justification (up to 5p)
  V. Sustainability of the Research Infrastructure (up to 2p)
  VI. Benefits to Canadians and Ontarians (up to 2p)
- Budget (Excel form)

Based on 2017, CFI IF Proposal Assessment Criteria will differ mainly in length.

Review Process

Expert Review Committee

- Chair plus 2–6 members
- In-depth review of 3–5 proposals each
- Committee report

Multidisciplinary Assessment Committees (MACs)

- Chair plus 10 members
- In-depth review of 10 proposals each

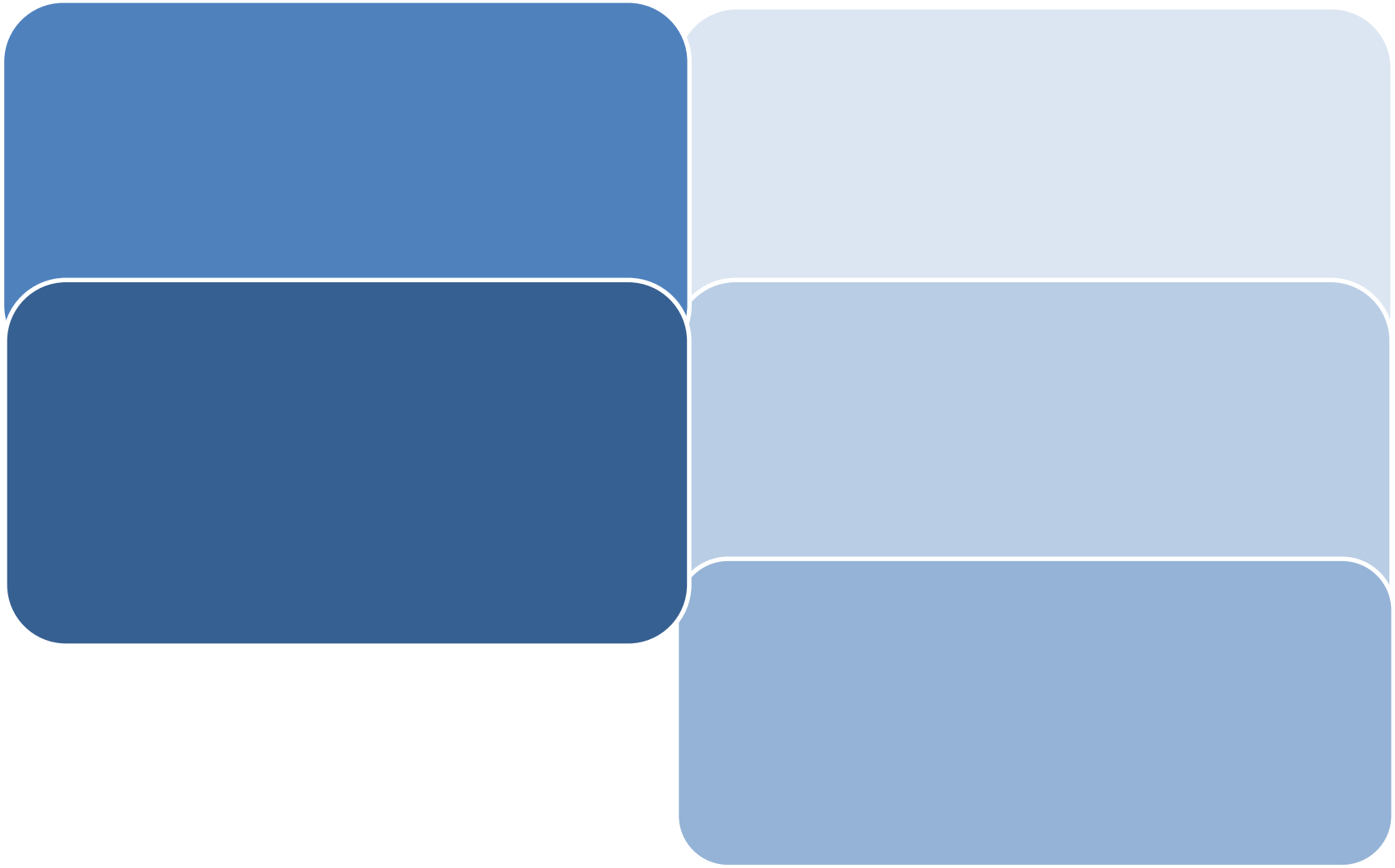
Special Multidisciplinary Assessment Committee (S-MAC)

- Chair plus 6 members

Innovation Fund Main Objectives

1

Objectives and Criteria



Assessment Criteria

Open with a compelling program overview

- Open assessment criteria with an introductory section.
- Address all three program objectives.
- Touch upon all six evaluation criteria.
- Write the summary in plain language and make it compelling.

1. Institutional Capacity and Track Record

The proposal builds on existing capacity and track record of key investments in people and infrastructure in the area of institutional strategic priority described in the proposal.

- **Why is the research and infrastructure important to U of T?**
  - Tie your proposal to the Strategic Research Plan and show past investments on which your project builds.
- **How is the institution supporting operations/ maintenance of existing infrastructure?**

1. Institutional Capacity and Track Record

Most common criticisms:

- Did not demonstrate existing capacity in this research area.
- Not enough detail on investments and alignment with strategic priorities at all institutions involved in the application.
- Needed more information about how past institutional investments have led to results, knowledge transfer, or IP/innovative technologies.

2. Research or Technology Development

The research or technology development activities are innovative, feasible, have the potential to lead to breakthroughs, and will enhance international competitiveness.

Introduction/Global Vision

- What is the overall vision for your research in a global context?

Proposed Research

- What are the key activities and how are they tied to the stated benefits?
- How will the infrastructure be used for these activities?
- What are the timelines? Be detailed enough to show that timelines are realistic.

2. Research or Technology Development

The research or technology development activities are innovative, feasible, have the potential to lead to breakthroughs, and will enhance international competitiveness.

Innovation and Global Leadership

- How do the infrastructure and research help position Canada as a global leader?
- Who are the leaders in the field worldwide?
- How is your work different and leading edge?

Timeliness and Impact

- Why do this research now?
- Why is this the time to invest in this infrastructure to make Canada internationally competitive?

2. Research or Technology Development

Most common criticisms:

- Methods lacked detail and did not address innovativeness; difficult to assess the feasibility or the potential for breakthroughs.
- Research unfocused, no cohesive objectives, and a low degree of synergy among the different projects or themes.
- Lacked detail about the current state of the field and the international research context.
- Needed a clearer outline of the motivation, key questions, objectives, and hypotheses.
- Feasibility of the proposed research design insufficiently convincing.
- Did not address potential research challenges, no contingency plan.

3. Team

The team is composed of established or emerging leaders and has the expertise and breadth, including relevant collaborations, to conduct the research or technology development activities.

You and your team are optimal users

- What expertise and previous experience does the team have using the requested infrastructure?

The project forges value-added partnerships

- How is this collaboration genuine and productive? What benefits does it produce?
- How does each team member add real strength? Emphasize quality, not quantity.

New equity, diversity and inclusion considerations are anticipated.

3. Team

Most common criticisms:

- Insufficient expertise in a particular research or a mismatch between team expertise and proposed research.
- Synergy of team members and across research topics or themes was not well described.
- More detail on the role of each group member and the involvement of end-users and partners.
- Needed additional research collaborators and/or more collaboration with end-users and the private sector.

4. Infrastructure Justification

The infrastructure is necessary and appropriate to conduct the research or technology development activities.

Infrastructure is essential

- What does it allow that would be impossible without it?
- How will you use it? Refer to specific research activities.
- Why can't your need be met elsewhere?
- If similar infrastructure exists, why is it inaccessible or inappropriate?

4. Infrastructure Justification

The infrastructure is necessary and appropriate to conduct the research or technology development activities.

Infrastructure is appropriate

- Why did you choose each tool for each task?
- If there are other options, why are the chosen options best?
- How long will the infrastructure last (expected life span)?

Infrastructure will be maximally used

- Where will the infrastructure be located to be accessible to all relevant users (especially for multi-site applications)?

4. Infrastructure Justification

Most common criticisms:

- Requested infrastructure/personnel was not well justified.
- Lacked detail regarding how the requested items will be used and enable innovative research.
- Did not address the duplication of existing infrastructure, fully leverage existing equipment, or describe the integration of requested infrastructure with complementary facilities at the institution.
- The infrastructure costs were too high.

5. Sustainability

Proposal presents a compelling plan for management, operation, and maintenance of the proposed infrastructure with tangible and appropriate commitments over its useful life.

Infrastructure will be well managed

- Scheduling, monitoring, training, security?
- How are major decisions made and by whom?

Infrastructure will be maintained over useful life

- What are the operating and maintenance costs?
- How will they be met? Discuss within your department/division
- Costs and revenues must balance.

5. Sustainability

Most common criticisms:

- Management plan lacked detail.
- Maintenance and repair budget was too low.
- The proposed user fees were not appropriate.
- Plans for long-term sustainability were not clearly described.

6. Benefits to Canada

The research or technology development results will be transferred through appropriate pathways to potential end users and are likely to generate social, health, environmental and/or economic benefits for Canadians

Who are the end-users?

- How will you transfer the knowledge/technology to end-users?
- Have a concrete plan and realistic timeline.
- What skills will HQP develop? What training will they receive? And why is this a benefit to them and to Canada?

6. Benefits to Canada

Most common criticisms:

- Needed clearer, more detailed pathways to knowledge translation and/or commercialization.
- Anticipated benefits appeared speculative.
- Knowledge mobilization potential was low and the knowledge transfer or commercialization plan was not convincing.
- Proposed HQP training was weak.

Summary

1. Cater your application to this funding opportunity.

- Address the Innovation Fund's main objectives.
- Clearly provide sufficient information for the requested assessment criteria.

2. The proposal should be a coherent whole.

- Research activities, collaborators, requested infrastructure, institutional priorities (and other criteria) should work well and clearly together.

3. Find a balance between ambition and feasibility.

- Reviewers must be excited about the investment in your project.
- They must also believe it can be accomplished.

Stay tuned!

CFI's Innovation Fund Website

innovation.ca/awards/innovation-fund

The (2017) tip sheet!

research.utoronto.ca/wp-content/uploads/2013/11/CFI_IF_2017_Tips_March-2016.pdf *

* The tip sheet will be updated when the 2019 guidelines are published.

Q & A