NSERC Research Tools and Instruments

Information Session

Wednesday, August 26th, 2020
Agenda

Research Tools and Instruments

- Overview of the program
- Program Updates
- Program-specific information and tips

**Discussant:** Dr. Diane Poulin-Dubois (Psychology)

Submission Process

- Review and approval workflow
- Internal Deadlines + Timelines
- ConRAD
Research Tools and Instruments

Program objectives

• Support the purchase or development of research equipment with a total net cost of $7,001 to $250,000:
  • While the RTI program provides the primary avenue to obtain support for tools and instruments costing more than $7,000, equipment of any value can be purchased using a Discovery Grant.

• NSERC will provide up to $150,000 in grant money. Any equipment over this amount and up to $250,000 must have matching funds.

• Applications to the RTI Program cannot include equipment that was purchased before the application deadline.
Equipment Support

• NSERC will only accept the following requests:
  • for tools and instruments that form a comprehensive system intended to support NSERC-funded research in the natural sciences and engineering. A comprehensive system is one in which each tool or instrument forms part of an integrated system of operation to support the research program(s)
    • requests that bundle unrelated tools and instruments together will not be accepted
  • for the purchase of new, used or refurbished equipment, for the repair, upgrade or rental of equipment, or for the fabrication of equipment that is not readily available off the shelf
  • for equipment that is purchased or rented after the application deadline
• **Note**: Equipment and items that are part of laboratory infrastructure or intended to render other equipment compliant with health and safety standards are ineligible for RTI support.
RTI Selection Committees

- Genes, Cells and Molecules
- Biological Systems and Functions
- Environmental Sciences
- Chemistry
- Physics
- Computer, Mathematical and Statistical Sciences
- Civil, Industrial and Systems Engineering
- Electrical and Computer Engineering
- Materials and Chemical Engineering
- Mechanical Engineering
RTI Updates Since 2016

1. Removal of institutional quotas in the 2017-2018 competition
2. Each researcher can now only be part of one RTI application per competition, either as PI or co-applicant but not both
3. RTI applications are submitted on the NSERC Portal similar to Discovery applications
4. Require CCVs from the PI and co-applicants
5. Supplier quotes are now required for the following cases
   1. Two (2) recent quotations for any individual item(s) over $25,000 (before taxes) or
   2. for any system(s) to be purchased from a single supplier and costing more than $25,000 (before taxes).
6. The page limit for the proposal is 4 pages
7. The budget justification now has to contain all the information about related funding of the applicant team, but still has a page limit of only 2 pages.
8. RTI applications are not reviewed by external experts, only by RTI committee members (discipline specific).
A Complete Submission Includes:

• Application Form (found on the Research Portal)
• Proposal (limit of four pages)
• Budget Justification (limit of two pages)
  • Concordia has a tax rebate of 6.93675%
• NSERC Researcher CCV for each applicant and co-applicant
• 2 price quotes (if applicable), tax included, for any equipment or system over $25,000 (before tax)
Eligibility

- Must hold one of the following NSERC research grants:
  - Discovery
  - Alliance
  - Strategic
  - CRD
  - IRC
  - CRC
  - CERC
  - Canada 150 Chair
# Eligible Expenses

<table>
<thead>
<tr>
<th>Type of expenditure</th>
<th>Eligible costs</th>
<th>Ineligible costs</th>
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</thead>
<tbody>
<tr>
<td><strong>Equipment</strong></td>
<td>Purchase or rental of equipment including taxes, shipping and handling</td>
<td>(ineligible funding costs must not be included in the application)</td>
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<tr>
<td></td>
<td>• Transportation/shipping costs for purchased equipment</td>
<td>• Salaries and benefits</td>
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<td>• Fabrication, assembly and installation of the equipment</td>
<td>• Travel*</td>
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<td></td>
<td>• Extended warranty or service contract</td>
<td>• Insurance costs for equipment and research vehicles</td>
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<td></td>
<td>• Brokerage and customs charges for the importation of equipment and supplies</td>
<td>• Laboratory infrastructure (including but not limited to ventilation systems, wiring, power units or electrical outlets, floors, ceilings, walls, plumbing, lighting and storage)</td>
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<tr>
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<td>• Testing/calibration costs</td>
<td>• Costs of the construction, renovation or rental of laboratories or supporting facilities</td>
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<td>• On-site costs of training staff to use equipment</td>
<td>• Equipment or items intended to render other equipment compliant with health and safety standards</td>
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<tr>
<td></td>
<td>• Software licensing or upgrades</td>
<td>• Consumables</td>
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*Travel* includes the costs of transportation and accommodation to and from the site of the research.
### RTI Updates for selection criteria

<table>
<thead>
<tr>
<th>Evaluation criteria 2017-2018</th>
<th>Evaluation criteria 2019-2020</th>
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</thead>
<tbody>
<tr>
<td>1. The excellence of the applicant(s) (20%)</td>
<td>1. Need, urgency and suitability of equipment for the research programs (40%)</td>
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<tr>
<td>2. The merit of the proposed research program(s) (20%)</td>
<td>2. Merit of the research programs supported by the equipment and excellence of the applicant(s) (40%)</td>
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<tr>
<td>3. The need and urgency for the equipment; including availability of, and access to, similar equipment. (20%)</td>
<td>3. Importance of the equipment for the training of highly qualified personnel (HQP) (20%)</td>
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<td>4. The suitability of the proposed equipment for the proposed research program(s) (20%)</td>
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<tr>
<td>5. The importance of the equipment for the training of highly qualified personnel (20%)</td>
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Equity Diversity and Inclusion

- Applicants are encouraged to increase the inclusion and advancement of under-represented and disadvantaged groups in the natural sciences and engineering as one way to enhance excellence in research and training. Where applicable, consideration of sex, gender and diversity in the research design should be addressed in the proposal. Equity, diversity and inclusion considerations should be developed into the rationale of the composition of research teams and trainees.

- For more information, applicants should refer to the Guide for Applicants: Considering equity, diversity and inclusion in your application.
Proposal-Selection Criteria

1. Need, urgency and suitability of equipment for the research programs (40%)

- Demonstration that the equipment is essential for the research, and that there are no other more cost-effective ways of obtaining the results;
- Availability of similar equipment/facilities/services in the vicinity;
- Impact of a delay in acquisition of equipment on the research and the pace of research progress;
- Need to upgrade or replace obsolete or failed equipment; and
- Degree of utilization of the equipment by the applicant(s) and other users.

Reviewer: When the justification for the equipment is based to some extent on the anticipated use by, or benefit to, other NSE sectors, the applicant should describe the support secured from these sources or the demonstrated efforts that have been made to secure it. The RTI Selection Committee should consider this information when assessing this criterion.
Proposal-Selection Criteria

2. Merit of the research program(s) supported by the equipment and excellence of the applicant(s) (40%)

- **Quality and significance of research programs**, including **potential for major advances** and impact in the discipline as a result of the equipment;
- **Feasibility of the plan to use the equipment**; and
- The excellence of the applicant(s), including scientific or engineering calibre of the applicant(s) and extent to which the applicant(s) has *relevant experience and demonstrated ability to fully use the equipment.*
- Consideration of equity, diversity and inclusion in the rationale of the team composition (applicant, co-applicant(s), and major users).
- **Reviewer:** Applicants are encouraged to strive for a diverse group of co-applicants and major users, including balanced gender representation. Equity, diversity and inclusion considerations should be reflected in the rationale of the team composition and where applicable, in the designated roles within the team.
Proposal-Selection Criteria

3. Importance of the equipment for the training of highly qualified personnel (HQP) (20%)

- quality and extent of training
- opportunity for hands-on training
- potential to provide marketable skills for students trained on the equipment
- consideration of equity, diversity and inclusion in the training of HQP
- Reviewer: The necessity of the requested item(s) for the completion of student projects and theses should be addressed under the first criterion, as it is related to need and urgency.
Budget Justification-2 pages

• Explain and justify each budget item – Provide a breakdown of items requested; detailing the model, manufacturer, prices, exchange rates, and applicable taxes

• Explain all financial contributions from industry, university or other sources towards purchase of equipment

• Discuss your quotes, why you favor one over the other.

• Provide explanations on relationship to other research support, as follows, for yourself AND co-applicants:
  • Any conceptual overlap between the research grants (applied for or awarded) to be supported by the proposed equipment and the RTI application
  • Any relationship and/or overlap (conceptual or financial) between the equipment requested in the RTI application and similar equipment applied for or supported by other funding sources.

• The idea is that there should be no DUPLICATION of funding for the same expense(s), and you should explain how funds will be used if all applications are successful.
Budget Justification (cont’d)

- If a cash contribution towards the purchase is provided by an organization (other than the applicants' institution[s]), a letter from the organization(s) confirming this commitment is required (upload as PDFs). Such letters must clearly and exclusively explain the financial contribution that the organization will provide to the purchase of the equipment.
- Cash contributions from applicants’ Discovery Grants do not require written authorization from NSERC.
- The use of funds from other types of NSERC grants must be accompanied by written authorization from NSERC (e.g. Strategic, Collaborative Research and Development or other Partnership grants).
Review Process and Funding Recommendations

• Up to 5 reviewers per RTI application
• No external reviews requested
• Committee members evaluate in isolation and do not discuss with other members, except during a teleconference scheduled SPECIFICALLY for FLAGGED applications
• Reviewers provide scores for each criterion from 1 (lowest) to 10 (highest)
• NSERC staff will enter the received scores into a spreadsheet and rank applications based on the average weighted totals
• Applications can be flagged by NSERC staff, the Chair, or members of the committee for additional discussion
• Normally for the full cost of the recommended items; partial recommendations are rare, but if made, the amount recommended must be sufficient for the purchase of a functional unit
Submission Process
Researcher submits grant to the ARD (ConRAD)

Application Full/Admin review by the ARD

Application review and approval by ADR, forwarded to OOR

Application for Signature with AVP

Institutional Review by Grants Manager

Review by RGU

Signed Application returned to Grants Manager

Application submitted to Agency

Application finalized on ConRAD and filed
**Full Content Review vs Administrative Review: Info and Timeline**

All grant applications are reviewed before their submission to external agencies. The scope of this review will vary based on the below:

<table>
<thead>
<tr>
<th>CONTENT DEVELOPMENT SUPPORT + REVIEW</th>
<th>PROGRAM AND ADMINISTRATIVE SUPPORT + REVIEWS</th>
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<tbody>
<tr>
<td><strong>10 business days (or more) prior to external deadline (voluntary, highly suggested)</strong></td>
<td><strong>5 business days prior to external deadline (mandatory)</strong></td>
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<td><strong>Method:</strong> by email, meeting</td>
<td><strong>Method:</strong> Final and complete application through ConRAD</td>
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1. Access to sample successful applications
2. Editing of non-technical sections for cohesiveness, formatting.
3. Assistance with budget development (conformance with agency and institutional approved rates, travel, indirect costs, and budget justification)
4. Detailed review of drafts following the evaluation criteria and peer evaluation manual
5. Liaison with sponsor agency

**Reviewer:** Advisor, Research Development

<p>| Reviewers: | Advisor, Research Development, Research Grant Unit |</p>
<table>
<thead>
<tr>
<th>Program</th>
<th>Full review deadline</th>
<th>Internal application through ConRAD and NSERC research portal</th>
<th>Agency</th>
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<tbody>
<tr>
<td>Research Tools and Instruments</td>
<td>October 12(^{th})</td>
<td>October 19(^{th})</td>
<td>October 26(^{th})</td>
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<td>All supporting documentation must be submitted to Conrad at this date.</td>
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## Contact Information

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<tr>
<th>SECTOR</th>
<th>ADVISOR</th>
<th>CONTACT INFORMATION</th>
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<tbody>
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