



**OFFICE OF THE VICE PRESIDENT,  
RESEARCH AND GRADUATE STUDIES**

# **NSERC Research Tools and Instruments**

## **Information Session**

June 22<sup>nd</sup> , 2023



# Agenda

## Research Tools and Instruments

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

## Submission Process

- Review and approval workflow
- Internal Deadlines + Timelines
- ConRAD

# Research Tools and Instruments

Agency deadline: October 25<sup>th</sup> , 2023\*\*

OOR deadline: October 18<sup>th</sup> , 2023

## 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 GUARANTEED matching funds.
  - Applications to the RTI Program **cannot** include equipment that was purchased before the application deadline. Awarded funds must be spent within 12 months of receiving the funds.
- \*\* pending NSERC program updates

# 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

- Successful applicants and co-applicants from the year prior must sit out the next competition
- Each researcher can now only be part of **one** RTI application per competition, either as PI or co-applicant but not both
- RTI applications are submitted on the NSERC Portal similar to Discovery applications
- Require CCVs from the PI and co-applicants
- Supplier quotes are now required for the following cases
  - Two (2) recent quotations for any individual item(s) over \$25,000 (before taxes) or
  - for any system(s) to be purchased from a single supplier and costing more than \$25,000 (before taxes).

# RTI Updates

- The page limit for the proposal is now **4 pages** and follows the selection criteria
- The budget justification now has to contain all the information about related funding of the applicant team, **with an increased limit of 3 pages.**
- New Budget table format for Budget Justification
- RTI applications are not reviewed by external experts, only by RTI committee members (discipline specific).
- Selection Criteria (and therefore Proposal Headings) have changed slightly)

## A Complete Submission Includes:

- Application Form (found on the Research Portal)
- Proposal (limit of four pages)
- Budget Justification (limit of 3 pages)
- 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)
  - Concordia has a tax rebate of 6.93675%



# Eligibility

- Must hold one of the following NSERC research grants:
  - Discovery/Horizons/Development
  - Alliance
  - Strategic
  - CRD
  - IRC
  - CRC
  - CFREF
  - CERC
  - Canada 150 Chair

# Eligible Expenses

Type of expenditure	Eligible costs	Ineligible costs (ineligible funding costs must not be included in the application)
Equipment	Purchase or rental of equipment including taxes, shipping and handling	
Other	<ul style="list-style-type: none"> <li>•Transportation/shipping costs for purchased equipment</li> <li>•Fabrication, assembly and installation of the equipment</li> <li>•Extended warranty or service contract</li> <li>•Brokerage and customs charges for the importation of equipment and supplies</li> <li>•Testing/calibration costs</li> <li>•On-site costs of training staff to use equipment</li> <li>•Software licensing or upgrades</li> </ul>	<ul style="list-style-type: none"> <li>•Salaries and benefits</li> <li>•Travel*</li> <li>•Insurance costs for equipment and research vehicles</li> <li>•Laboratory infrastructure (including but not limited to ventilation systems, wiring, power units or electrical outlets, floors, ceilings, walls, plumbing, lighting and storage)</li> <li>•Costs of the construction, renovation or rental of laboratories or supporting facilities</li> <li>•Equipment or items intended to render other equipment compliant with health and safety standards</li> <li>•Consumables</li> </ul>

# RTI Updates for Proposal-Selection criteria

<b>Evaluation criteria 2017-2018</b>	<b>Evaluation criteria 2023-2024</b>
1. The excellence of the applicant(s) (20%)	1. Need, urgency and suitability of equipment for the research programs (40%)
2. The merit of the proposed research program(s) (20%)	2. Feasibility and Impact (40%)
3. The need and urgency for the equipment; including availability of, and access to, similar equipment. (20%)	3. Training of highly qualified personnel (HQP) (20%)
4. The suitability of the proposed equipment for the proposed research program(s) (20%)	
5. The importance of the equipment for the training of highly qualified personnel (20%)	

# 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: 4 pages, based on 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

## 2. Feasibility and Impact (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
- Extent to which the applicant has relevant experience or has presented a training plan to demonstrate how they will gain the 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

## 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
  - Demographic data is not requested or required to assess any impacts resulting from the consideration of EDI in the research team and training environment.

**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-3 pages

- Explain and justify each budget item –Provide a breakdown of items requested; detailing the model, manufacturer, prices, exchange rates, and applicable taxes (**Concordia has a tax rebate, so applicable tax is only 6.94%**) using the **table format suggested in the instructions**
- **Use TEMPLATE table provided in instructions**
- You must provide two (2) recent quotations for any individual item(s) over \$25,000 net\* or for any system(s) to be purchased from a single supplier and costing over \$25,000 net\*. If the required number of quotations cannot reasonably be submitted, you must provide a clear justification in the Budget justification section.
  - Net cost is defined as the purchase cost of the equipment after any discount from the vendor and before taxes, customs and importation fees, transportation and shipping charges, and assembly and installation costs.
- Explain all financial contributions from industry, university or other sources towards purchase of equipment. These funds must be secured at the time of submission!
- Discuss your quotes, why you favor one over the other.



## Budget Justification (cont'd)

- Provide explanations on relationship to other research support, operating and equipment, 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)
- All proposed expenditures, including those taken from quotations, must be in Canadian dollars. To convert to Canadian currency, you must use an exchange rate consistent with the Bank of Canada rate at the time of application.



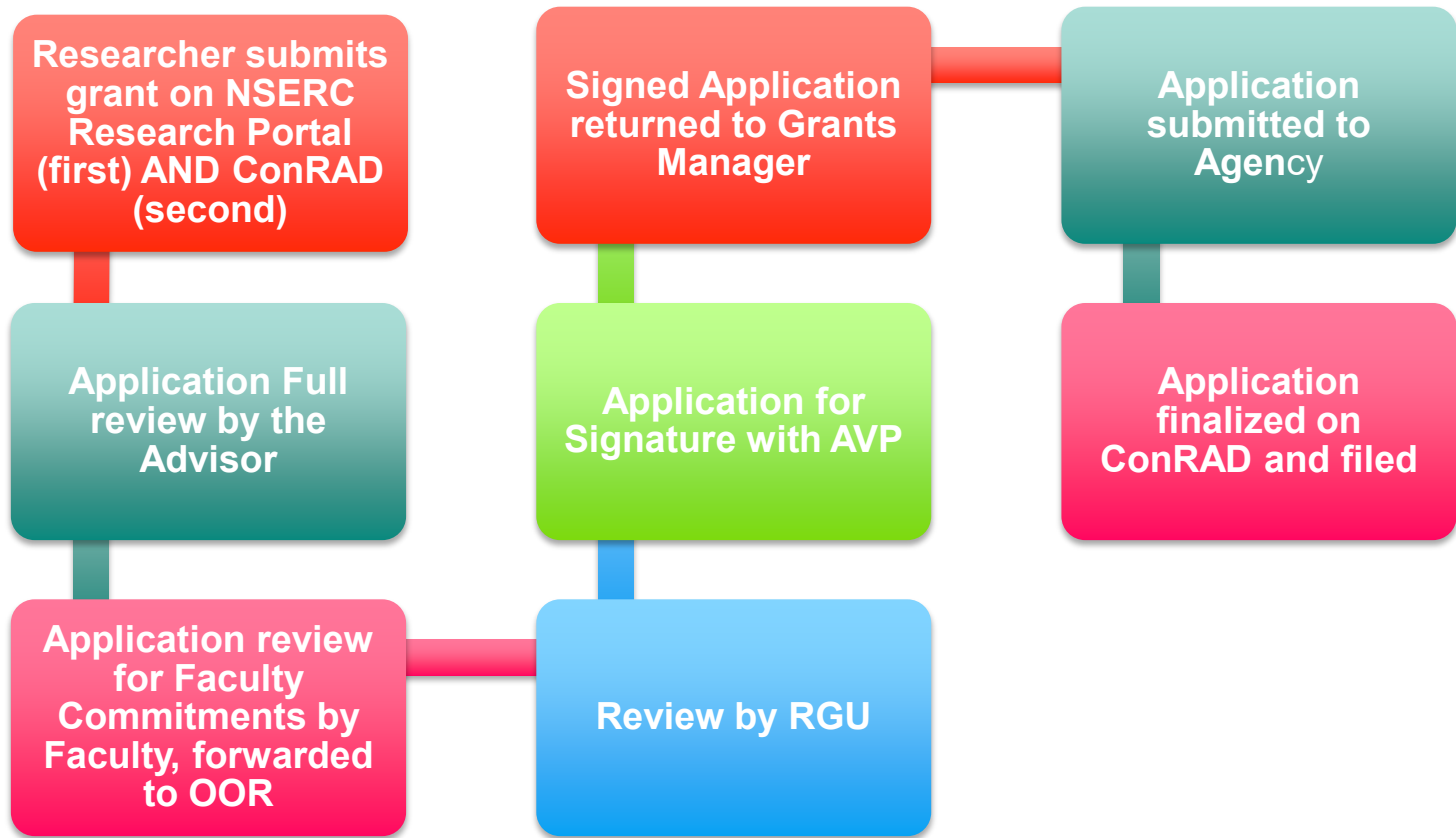
# Review Process and Funding Recommendations

- 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

# Internal Faculty Process

- Let your Advisor know well in advance of submission if you plan on applying.
- All applications must be run by Facilities. This is to determine whether any modifications are required to your lab space should the equipment be awarded



## 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:

CONTENT DEVELOPMENT SUPPORT + REVIEW	PROGRAM AND ADMINISTRATIVE SUPPORT + REVIEW
<p><b>10 business days (or more) prior to external deadline (voluntary)</b></p> <p><b>Method:</b> by email, meeting</p>	<p><b>5 business days prior to external deadline (mandatory)</b></p> <p><b>Method:</b> Final and complete application through <a href="#">ConRAD</a></p>
<ol style="list-style-type: none"> <li>1. Access to sample successful applications</li> <li>2. Editing of non-technical sections for cohesiveness, formatting.</li> <li>3. Assistance with budget development (conformance with agency and institutional approved rates, travel, indirect costs, and budget justification)</li> <li>4. Detailed review of drafts following the evaluation criteria and peer evaluation manual</li> <li>5. Liaison with sponsor agency</li> </ol>	<p>Review of application for:</p> <ol style="list-style-type: none"> <li>1. completeness,</li> <li>2. conformance to sponsor guidelines,</li> <li>3. required signatures,</li> <li>4. support letters,</li> <li>5. and electronic submission.</li> </ol>
<p><b>Reviewer:</b> Advisor, Research Development</p>	<p><b>Reviewers:</b> Advisor, Research Development, Research Grant Unit</p>



Program	Full review deadline	Internal application through ConRAD and <u>NSERC</u> research portal	Agency
Research Tools and Instruments	October 11 <sup>th</sup>	October 18 <sup>th</sup>	October 25 <sup>th</sup>
		<p><b>All supporting documentation must be submitted to Conrad at this date.</b></p>	

# Contact Information

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