





# Natural Sciences and Engineering Research Council of Canada

www.nserc-crsng.gc.ca



Home > Professors

## Professors

Grants Programs  
Overview

Innovation

Chairs and Faculty  
Support Overview

Research Tools and  
Instruments and  
Infrastructure  
Programs

Direct Deposit

Resource Videos

Contact Newsletter

Frequently Asked  
Questions

Eligibility

Application  
Deadlines and

[Back](#) [Print](#) [Bookmark](#) [Larger](#) [Smaller](#) [Share](#)



**NSERC offers research grants for a wide range of programs and projects, covering every discipline of the natural sciences and engineering.**

The *Program Guide for Professors* and the **Tri-Agency Financial Administration Guide** contain information that will be needed by applicants and NSERC award holders. These guides supersede all previous statements by NSERC on award guidelines. The regulations and policies governing the awards will be in effect as of September 15, 2014. NSERC may, without notice, alter the programs or the terms and conditions of the awards. Any major changes will be announced immediately on NSERC's Web site.

[http://www.nserc-crsng.gc.ca/Professors-Professeurs/Index\\_eng.asp](http://www.nserc-crsng.gc.ca/Professors-Professeurs/Index_eng.asp)

# NSERC Programs

- **Discovery Grants:**
  - promote and maintain a diversified base of high-quality research capability in the natural sciences and engineering in Canadian universities;
  - foster research excellence; and
  - provide a stimulating environment for research training.
- **Research Tools and Infrastructure (RTI) Grants:**
  - foster and enhance the discovery, innovation and training capability of university researchers in the NSE by supporting the purchase of research equipment and installations
  - \$7,001 to \$150,000 (all disciplines); \$150,001 to > \$325,000 (Subatomic Physics)
- **Engage:** \$25K short term / 6 month project w/ Canadian company
- **Collaborative Research and Development (CRD):** Industry Partners
- **Strategic Network Grants / Strategic Project Grants**
- **Collaborative Health Research Projects (CHRP)**

For More Details on Grant Programs See:

[http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/index\\_eng.asp](http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/index_eng.asp)

# Discovery Grants: Key Deadlines

## **July 15, 2015 (1-3 pm) – INFORMATION SESSION**

- RSO will offer an information session to prepare for the NOI
- Tanz Neuroscience Building, Room 6 RSVP by July 13<sup>th</sup> to Joanna Baylon: 416-978-2525, joanna.baylon@utoronto.ca

## **August 3, 2015 (8 pm) – NOTICE OF INTENT (NOI)**

- NOI completed on Government of Canada Research Portal ([http://www.nserc-crsng.gc.ca/ResearchPortal-PortailDeRecherche/Index\\_eng.asp](http://www.nserc-crsng.gc.ca/ResearchPortal-PortailDeRecherche/Index_eng.asp))
- NSERC version of the Canadian Common CV (CCV) (<https://ccv-cvc.ca/indexresearcher-eng.frm>)

## **October 23, 2015 (5 pm) – INTERNAL GRANT SUBMISSION DEADLINE**

- Submit complete MRA with application and CCV as attachments (MRA approval process must be started well in advance).

## **November 1, 2015 (11 AM) – NSERC GRANT SUBMISSION DEADLINE**

- Submit application through NSERC's Research Portal
- Once application finalized, link your CCV to your application and verify
- Submit to Research Services by clicking "Submit" button

Questions about the program can be addressed to Keti Dzamova ([keti.dzamova@utoronto.ca](mailto:keti.dzamova@utoronto.ca)).

# Eligibility of Subject Matter

- Discovery Grants Programs support:
  - Research programs in the natural sciences and engineering (NSE); and
  - Interdisciplinary research that is predominantly in the NSE
    - Significance, impact, advancement of knowledge or practical applications in NSE
- The same proposal cannot be submitted to two federal granting agencies
- Eligibility guidelines on NSERC's Web site and [www.science.gc.ca](http://www.science.gc.ca)
- Applications deemed more appropriate for another agency will be rejected



# Keys to a Successful Discovery Grant

## “Program versus Project”

The Discovery Grants program aims to support a researcher’s ongoing research program, which can comprise a number of well-defined projects. If projects are defined without being placed in the broader context of a program, the indicators show that a rating of *Insufficient* is warranted.”

### Seek and listen to advice from peers

- current Discovery Grant holders
- members of Evaluation Group panels
  - NSERC program officers



# The Proposal: Nuts and Bolts

## Specific Headings:

1. Recent progress
2. Objectives
3. Literature review
4. Methodology
5. Impact

### 1. Recent Progress

- Describe your recent progress in research activities related to the proposal
- Explicitly note progress attributable to your previous Discovery Grant
  - papers / graduates (with jobs) / presentations / awards
- What specific contributions have been made, and how were they published/communicated?
- Emphasize impact in the natural sciences and engineering



# The Proposal: Nuts and Bolts

## 2. Objectives

- Define the long-term goals and short-term objectives of your research program
- These should be specific, well-focused and realistic
- They should also define a high-quality research program
- Make sure the relationship between the short-term objectives and long-term goals is clear
- Show how attaining these goals would lead to a notable advancement or innovation in the field or results of importance to a broad applications – in natural sciences and engineering....





# The Proposal: Nuts and Bolts

## 3. Literature Review

- Discuss the literature pertinent to the proposal, placing the proposed research in the context of the state-of-the-art
- Position the proposed research within the field
- Refer to the relevant literature and how it relates to the proposal, and provide a brief review of this prior work
- Demonstrate a solid knowledge of the field



# The Proposal: Nuts and Bolts

## 4. Methodology

- Describe the methods and proposed approach
- Provide sufficient detail to allow the reviewers to assess the feasibility of the research activities
- A significant portion of the proposal should be devoted to a careful description of the methodology
- Potential problems should be stated. If reviewers see problems that the researcher does not seem to have noticed, they may view the proposal negatively. Describe alternative strategies...



# The Proposal: Nuts and Bolts

## 5. Impact

- Explain the anticipated significance of the work
  - avoid “motherhood” statements – unless you have concrete facts to back up your assertion
- Be succinct and to the point, e.g., explicitly list anticipated outcomes and impacts

**TOTAL PROPOSAL PAGE LIMIT: 5 PAGES!!!**



# Contributions to the Training of HQP

## Past contributions to Training:

- **NEW:** Use an asterisk to identify students who are co-authors on the listed contributions
- Explain your role in co-supervision activities
- Explain any delays that might have affected your ability to train HQP
- Describe nature of HQP studies
  - HQP ranges from undergraduate theses and summer projects to postdoctoral levels, and includes technical and other research personnel

***Use the space available – HQP training is 33% of your score!***



# Contributions to the Training of HQP

## Training Plan

- Describe the nature of the training (e.g., length, specific projects) in which HQP will be involved, the HQP's contributions and pertinence to the research program proposed
- Discuss the training philosophy and the expected outcomes
- Clearly define your role in any collaborative research and planned joint HQP training

***Use the space available – HQP training is 33% of your score!***

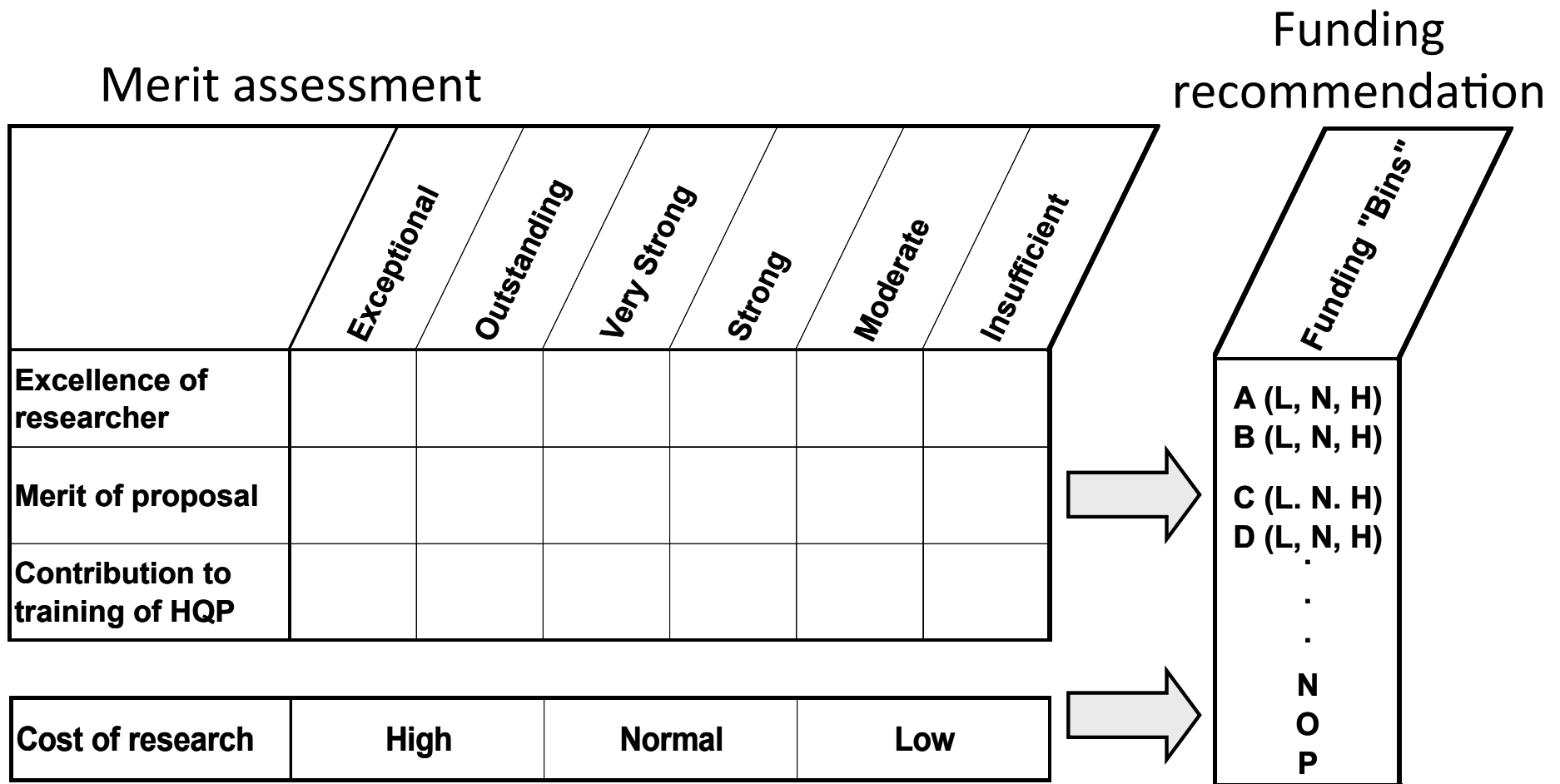


# Discovery Grant Evaluation Process

- **Merit Assessment uses a six-point scale to evaluate:**
  - **Scientific or engineering excellence of the researcher**
    - Knowledge expertise and experience
    - Contributions to research in NSE
    - Importance of contributions
  - **Merit of the proposal**
    - Originality and innovation
    - Significance and expected contributions to research/technological impact
    - Clarity/scope of objectives and appropriateness of methodology
    - Appropriate and justification of budget
  - **Contributions to the training of HQP**
    - Quality and impact of contributions of training in past 6 years
    - Proposed plan for future training – Describe nature of training
    - Review NSERC guidelines on assessment of contributions for research and training

**Two-step process separates merit assessment from funding recommendations.**

# Discovery Grant Evaluation Process



- Each criteria has 6 possible ratings. This results in 18 possible “bins” for ranking the grant.
- A score of “insufficient” in any criteria is fatal.
- Moderate for any category is problematic (except HQP for early career researchers).

# Discovery Grant Evaluation Process

- Applications are grouped in “bins” of comparable merit
- **Funding Recommendations:** projects with similar overall ratings within an Evaluation Group (EG) receive comparable funding to ensure consistency in the evaluation process
- **Evaluation Groups:** There are currently 12 EG, with members assigned based on expertise and subject matter

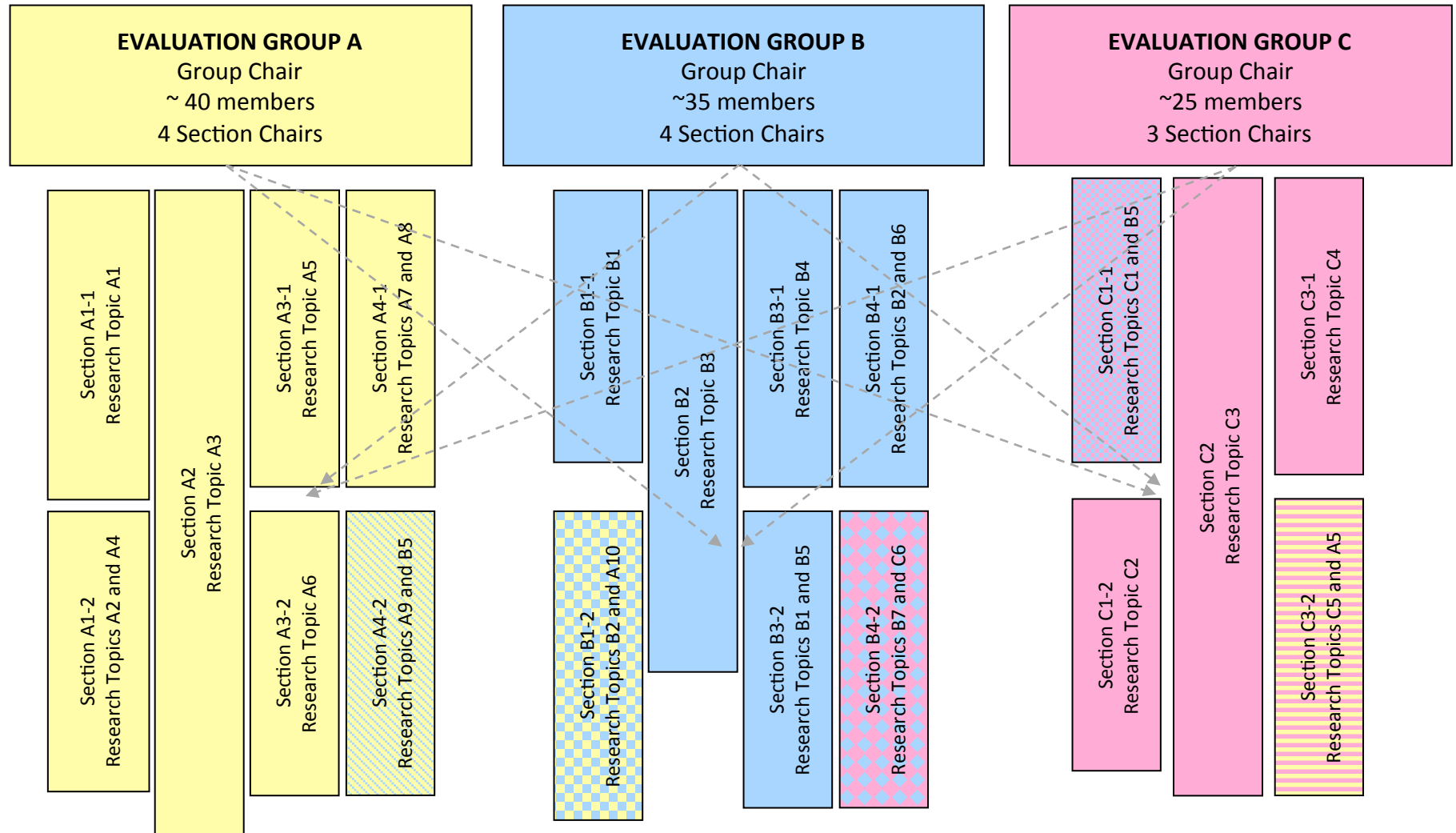
- 1501 - Genes, Cells and Molecules
- 1502 - Biological Systems and Functions
- 1503 - Evolution and Ecology
- 1504 - Chemistry
- 1505 - Physics
- 1506 - Geosciences
- 1507 - Computer Science

- 1508 - Mathematics and Statistics
- 1509 - Civil, Industrial and Systems Engineering
- 1510 - Electrical and Computer Engineering
- 1511 - Materials and Chemical Engineering
- 1512 - Mechanical Engineering

\*Be sure to carefully select your topic area and Evaluation Group



# How Does the Conference Model Work?



# Keys to a Successful Application

## EXCELLENCE OF THE RESEARCHER

- Knowledge / expertise / experience
- NSE impact of research – usual metrics (talks / papers) – only look at information provided
  - individual vs team
  - lead author? Member of group?
  - impact factor; h-index; where published? Has this been a major impact (recently?)
- Focus on past 6 years – productivity vs investment....
- Stature of the applicant
  - are they recognized as a leader / potential leader in the field?
  - what have they done? Are they piggy-backing on others?
  - impact in basic science / translation / ???
- Contributions to research
  - new ideas, impact on the field, research accomplishments



# Keys to a Successful Application

## MERIT OF PROPOSAL

- **Originality and innovation**
  - Proposal suggests new or potentially transformative concepts and inquiry
- **Significance** and (expected) contributions to natural sciences and engineering
  - Major potential for impact, innovation, advancement of knowledge
- **Clarity and scope** of objectives
  - A clear **program** is described in the proposal
  - The **long-term** and **short-term** objectives are clearly described
- **Feasibility**
  - The methods/approaches are well described and appropriate
  - The objectives will be reached within proposed timeframe
- **Budget** appropriateness and justification
  - Clear and comprehensive explanation of the relationship between other sources of funding and the current proposal



# Keys to a Successful Application

- **Discuss relationships to other research support**
  - For each grant currently held or applied for, clearly provide: the main objective, a brief outline of the methodology, budget details, and details on the support of HQP
  - Must include summary and budget pages for CIHR and SSHRC grants currently held or applied for
  - Onus is on applicant to make this clear – do NOT leave this up to the reviewers to make the judgement call
- **Explain any potential conceptual overlap with other programs/projects**
  - Complementary research is encouraged, but must be clearly explained
- **Saying “there is 0 overlap” is not sufficient**



# Discovery Grants Overall Results – 2015 Competition

| Data <sup>1</sup>                         | Success Rate | Average Grant (\$) |
|---|--------------|--------------------|
| Early Career Researchers (ECR)            | 65%          | \$26,191           |
| Established Researchers (ER)              |              |                    |
| Renewing their grant (ER-R)               | 82%          | \$35,109           |
| Not Holding a Grant <sup>2</sup> (ER-NHG) | 38%          | \$26,756           |

1. Includes Discovery and Subatomic Physics (Individual and Team) Grants, but excludes the Subatomic Physics Projects.

2. Includes returning established unfunded applicants and experienced researchers submitting a first application



# RTI Grants: Key Deadlines

- The Research Tools and Instruments (RTI) program, Category 1, offers one-year awards between \$7,001 and \$150,000 (maximum) to assist with purchasing or developing research equipment. Applications requesting up to \$250,000 are permitted, provided the difference between the amount requested from NSERC (up to \$150,000 or less) is covered by other sources which must be in place when the RTI application is submitted to NSERC.
- The number of RTI proposals UofT can submit for 2015 is: **51**.

## **June 25, 2015 (10 am) – NOTICE OF INTENT**

- Complete a mandatory Notice of Intent form, available at:  
<http://www.research.utoronto.ca/wp-content/uploads/2011/07/RTI-UofT-NOI-Form5.doc>
- Email NOI to [joanna.baylon@utoronto.ca](mailto:joanna.baylon@utoronto.ca)

## **July 20, 2015 (5 pm) – COMPLETE APPLICATION**

- Complete an Application using NSERC's Research Portal and the Canadian Common CV
- Submit Application, CCV, and MRA by deadline

## **October 16, 2015 (3 pm) – FINAL APPLICATION (for those chosen to submit to NSERC)**

Questions about the program can be addressed to:  
Mike Folinas ([m.folinas@utoronto.ca](mailto:m.folinas@utoronto.ca)) or Keti Dzamova ([keti.dzamova@utoronto.ca](mailto:keti.dzamova@utoronto.ca)).

# RTI Grants –Selection Criteria

- Excellence of the applicant(s)
- Merit of the proposed research program(s)
- Need and urgency for the equipment -including availability of, and access to, similar equipment
- Suitability of the proposed equipment for the proposed research program(s)
- Importance of the equipment for the training of HQP



# Research Tools and Instruments

- Smaller national competition with quota of applications per university

|              | <b>2015</b> | <b>2014</b> | <b>2013</b> |
|--------------|-------------|-------------|-------------|
| Budget       | \$25M       | \$19.5M     | \$25M       |
| # Appl.      | 666         | 468         | 1,262       |
| # Funded     | 218         | 176         | 295         |
| Success Rate | 33%         | 38%         | 23%         |
| Funding Rate | 34%         | 38%         | 24%         |



# Discovery Grant/RTI Reminders

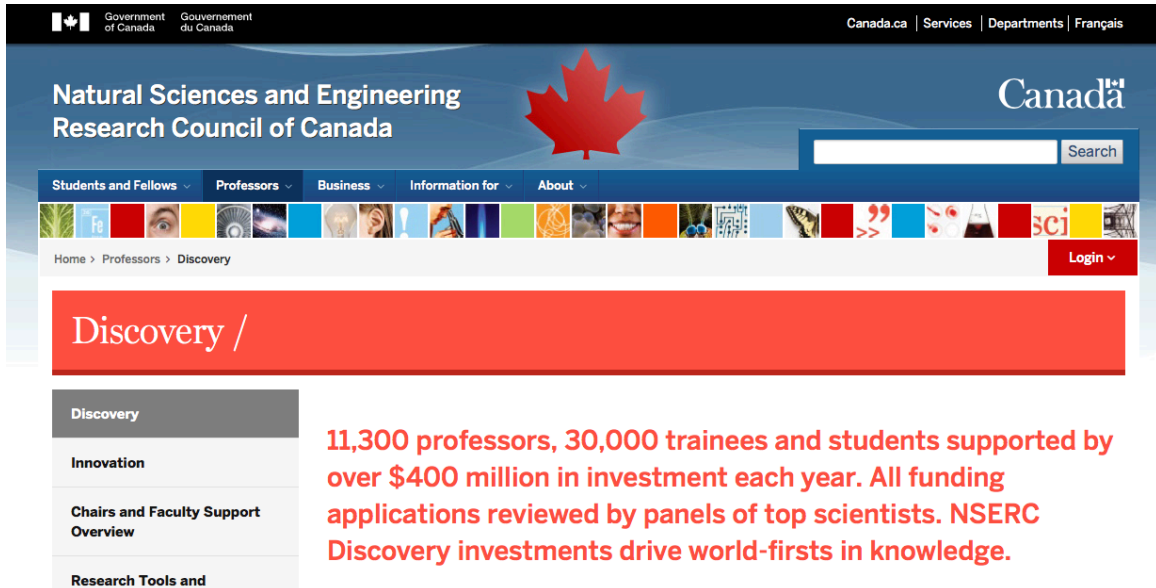
- Consult the *Peer Review Manual*, Section 6 (DG) or Section 7 (RTI)
- Read all instructions carefully and follow presentation standards
- Ensure completeness of application
- Ask colleagues and/or your RGO for comments on your application
- Read other successful proposals
- Plan ahead and check institution deadlines
  - Give yourself time: CCV for DG; F100 for RTI



# Key NSERC Resources

- For Overview of NSERC Grant Programs:

- [http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/index\\_eng.asp](http://www.nserc-crsng.gc.ca/Professors-Professeurs/Grants-Subs/index_eng.asp)



The screenshot shows the NSERC website interface. At the top, it displays the Government of Canada logo and navigation links for Canada.ca, Services, Departments, and Français. The main header features the NSERC logo and a search bar. Below the header, there are navigation tabs for Students and Fellows, Professors, Business, Information for, and About. A red banner highlights the 'Discovery' program. To the left of the banner is a sidebar menu with options: Discovery, Innovation, Chairs and Faculty Support Overview, and Research Tools and. To the right of the banner, a red text box contains the following information: "11,300 professors, 30,000 trainees and students supported by over \$400 million in investment each year. All funding applications reviewed by panels of top scientists. NSERC Discovery investments drive world-firsts in knowledge."

- For Details on Preparing NSERC Discovery & RTI Grants:

- [http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Visits-Visites/grants-subventions\\_eng.asp](http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Visits-Visites/grants-subventions_eng.asp)
- [http://www.nserc-crsng.gc.ca/Professors-Professeurs/Index\\_eng.asp](http://www.nserc-crsng.gc.ca/Professors-Professeurs/Index_eng.asp)

## Resource Videos

Helpful information about applying for a Discovery Grant

[Learn more](#)

## Discovery Grants Information Centre

Processes, competition results, FAQs and more

[Learn more](#)

# N SERC Contacts

|   |  |
|---|--|
| EGs Program Officer   | <a href="mailto:firstname.lastname@nserc-crsng.gc.ca">firstname.lastname@nserc-crsng.gc.ca</a>           |
| Deadlines, acknowledgement of applications and results                  | Your university RGO  |
| Your account, Grants in Aid of Research Statement of Account (Form 300) | Your university Business Officer (BO)  |
| N SERC Web site   | <a href="http://www.nserc-crsng.gc.ca">www.nserc-crsng.gc.ca</a>   |
| Discovery Grants Program (including eligibility)                        | E-mail: <a href="mailto:resgrant@nserc-crsng.gc.ca">resgrant@nserc-crsng.gc.ca</a><br>Tel.: 613-995-5829 |
| Use of Grant Funds  | E-mail: <a href="mailto:awdad@nserc-crsng.gc.ca">awdad@nserc-crsng.gc.ca</a>                             |
| On-line Services Helpdesk   | E-mail: <a href="mailto:webapp@nserc-crsng.gc.ca">webapp@nserc-crsng.gc.ca</a>                           |

