



NSERC Discovery Grants Information Session

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Chair, GSC 14



Are You Eligible?

- Hold, or have a firm offer of, an academic appointment at a Canadian institution (minimum three-year term position)
- Position requires independent research and allows supervision of Highly Qualified Personnel (HQP)



Are You Eligible?

- Researchers holding a position of any kind outside Canada must spend a minimum of six months per year at an eligible Canadian institution.
- Inform NSERC when a change in your status occurs (including sabbatical and leave periods).



Discovery Grants

- Promotes and maintains a diversified base of research capability in the NSE in Canadian institutions
- Supports ongoing programs of research, rather than projects
- Inherent flexibility in the research program
- Success rate: approximately 70%
- Average grant: \$30K [\$16K in Statistical Sciences]



Eligibility of Subject Matter

- Supports research programs in the NSE
- Interdisciplinary research is encouraged but should be predominantly in NSE
- Significance, impact, advancement of knowledge or its practical application in NSE
- Guidelines on health research can be found on NSERC's Web site



Life Cycle of a DG Application

August 1 to mid-September

Form 180 - Assignment of GSC and Referees

November 1*

Submission of Grant Application

November 22

Chairs' Meeting – Confirmation of GSC

Mid-November

Mail-out to External Referees

Mid-December

Mail-out to GSC Members

February

Grants Competition

March – April

Announcement of Results



Notification of Intent to Apply for a Discovery Grant (Form 180)

- Facilitates selection of external referees
- Deadline: August 1
 - Can have adverse consequences if not submitted
- List contributions (2002-2008)



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Levels of Review

Generally, at least six people read your proposal:

- One primary reviewer*
- One secondary reviewer*
- Four readers*
- External reviewers (1-4, usually 3)

* Chosen from 10 members of the Statistics Grant Selection Committee.



The Discovery Grant Evaluation Criteria

- Excellence of the researcher(s)
- Merit of the proposal
- Training of highly qualified personnel (HQP)
- Budget



Excellence of Researcher

- Knowledge, expertise and experience
- Contribution to research in the Statistical Sciences.
- Importance of contributions
- Complementarity of expertise and synergy for group applications



Merit of the Proposal

- Originality and innovation
- Significance and expected contribution to research in the Statistical Sciences
- Clarity and scope of objectives
- Clarity and appropriateness of methodology
- Feasibility of program



Training of HQP

- Quality and extent of past and potential contributions
- Appropriateness of proposed work for training
- Training in collaborative or interdisciplinary environment



Reporting HQP

Name	Type of HQP Training	Years Supervised or Co-supervised	Title of Project or Thesis	Present Position
Consent obtained				
Imadoc, Marie	Masters (completed)	Supervised 2003-2005	Isotope geochemistry in petroleum engineering	V-P (research), Earth Analytics Inc., Calgary, AB
Consent not obtained				
(name withheld)	Masters (completed)	Supervised 2003-2005	Isotope geochemistry	Research executive in petroleum industry – Western Canada



Reporting HQP

- Little known fact (from NSERC instructions on personal data form):
 - Use **boldface** to indicate students who are co-authors on the contributions listed.
 - NSERC requires you to boldface students, even if you do not have consent to release personal data.



Budget

- Appropriateness of the budget justification
- Relative cost of the proposed program of research (low, medium or high) for the topic area



Additional Considerations

Within the framework of the selection criteria, the GSCs consider factors such as:

- The potential and research plans of new applicants
- Applicant's role in collaborations and joint publications
- Guidelines for the preparation and review of applications in:
 - Interdisciplinary research;
 - Engineering and applied science; and,
 - Health sciences
- Adjunct, Emeritus and Part-time Professor status



FORM 101 YOUR GRANT PROPOSAL

Institutional Identifier

Family name of applicant: _____ Given name: _____ Initial(s) of all given names: _____ Personal identification no. (PIN): _____

Institution that will administer the grant: _____ Language of application: _____ Time (in hours per month) to be devoted to the proposed research / activity: _____

Type of grant applied for: _____

Title of proposal: _____

Merit of the proposal

Training of HQP

Potential HQP

CERTIFICATION/REQUIREMENTS

If this proposal involves any of the following, check the box(es) and submit the protocol to the university or college's certification committee.

Research involving: Humans Human pluripotent stem cells Animals Biohazards

Does any phase of the research described in this proposal a) take place outside an office or laboratory, or b) involve an undertaking as defined in Part 1 of Appendix B? NO YES (If YES to either question a) or b) – Appendices A and B must be completed)

Budget

TOTAL AMOUNT REQUESTED FROM NSERC				
Year 1	Year 2	Year 3	Year 4	Year 5

Budget justification
Relationship to other sources of funds

SIGNATURES (Required)

Applicant's department, institution, tel. and fax nos., and e-mail: _____

Dean of faculty

President of institution (or representative)



F100 YOUR RESEARCH PROFILE

Family name: _____ Institution no. (PIN): _____

I hold a faculty position at an eligible Canadian college (complete Appendices B1 and C)

I do not or will not hold an academic appointment at a Canadian postsecondary institution

APPOINTMENT AT: _____

Title of position: _____

Department: _____ Campus: _____

Part-time appointment Full-time appointment

For all non-tenured or non tenure-track academic appointment and Emeritus Professors, complete Appendices B & C
For life-time Emeritus Professor and part-time positions, complete Appendix C

Excellence of the Researcher

Discipline	Institution	Country	Date yyyy/mm

Past HQP record

TRAINING OF HIGHLY QUALIFIED PERSONNEL

Indicate the number of students, fellows and other research personnel that you:

	Currently		Over the past six years (excluding the current year)		Total
	Supervised	Co-supervised	Supervised	Co-supervised	
Undergraduate					
Master's					
Doctoral					
Postdoctoral					
Others					
Total					

List of other sources of funds



FORM 101

Grant Proposal: Tips

- Write “*summary of proposal for public release*” paragraph in plain language – reviewers read it!
- Provide a progress report on related research
- Position the research within the field
- Articulate short- and long-term objectives
- **Provide a detailed methodology**



FORM 101

Grant Proposal: Tips

- Describe plans for training
- Prepare realistic budget
- Discuss any relationship to other research support
- Address recent GSC comments



FORM 100

Personal Data Form: Tips

- List all sources of support
- Describe five most significant research contributions
- List other research contributions (2002-08)
- Describe contributions to training (2002-08)
- Give other evidence of impact of work
- Explain any delays in research activity



A Complete Discovery Grant Application Includes:

1. An Application for a Grant (Form 101) with supporting documentation
2. A Personal Data Form (Form 100) with appropriate appendices
3. Samples of research contributions (reprints, pre-prints, thesis chapters, manuscripts, etc.)
4. Environmental Assessment, if required



Research Tools and Instruments

- Deadline date – October 25
- Ongoing moratorium on Categories 2 and 3
- \$150,000 or less available from NSERC
- Must hold or have submitted an NSERC research grant (not necessarily a Discovery Grant)
- **Little known fact: A Grant Selection Committee's RTI competition budget is based on the total amount applied for.**



RTI FORM 100

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FORM 101

Research Tools and Instruments Category 1

- What research is being done with equipment?
- Justify each item
- Explain need and urgency of overall request
- Suitability of proposed equipment for research program
- Indicate impact on training
- Give alternate configurations and prices



Final Advice

- Use the 2008 Web version of the forms and Guide.
- Read all instructions carefully and follow presentation standards.
- Ensure completeness of application.
- Remember that more than one audience reads your application.
- Ask colleagues for comments on your application.
- Read other successful proposals.
- Read the *Peer Review Manual*.



Contacts

Grant Selection Committee Program Officer	judie.foster@nserc.ca (GSC 14 program officer)
Deadlines, Acknowledgement of Applications, Results	Your Research Grant Officer
Your Account, Grants in Aid of Research Statement of Account (Form 300)	Your Business Officer
NSERC Web site	www.nserc.gc.ca
Discovery Grants (including eligibility)	resgrant@nserc.ca 613- 995-5829
Use of Grant Funds	casdfinance@nserc.ca
On-line help	webapp@nserc.ca

Hugh's extra thoughts

- Upcoming Liaison article (also on my webpage)
- Several other very good articles on preparing a NSERC grant application are online (and will be listed in my article)
- *“No amount of care and effort in preparing a research grant proposal will compensate for a weak research program. However, a poorly prepared proposal can prevent a strong research proposal from being funded at the level it deserves.”*
– Ian Witten & Janice Glasgow

Hugh's extra thoughts

- Disclaimer: NSERC is the authoritative source of information. They have useful tips and guides on their website.
- Final word: Don't be afraid to ask for help and advice from experienced applicants, and do it early!



2008 Competition Results - Overall

Discovery Grants

	New Applicants	Renewal Applicants	Overall
Success Rate	62%	73%	71%
Average Grant	\$23,160	\$31,330	\$29,818

Research Tools & Instruments

Success Rate = 37%

Funding Rate = 33%

Average Grant = \$64,662



GSC-14 - 2008 DG Results

	FTA					Returning			
	FN	FA	FNA	RUN	TOTAL	R\$	RF\$	RU	TOTAL
# Appl.	25	7	0	7	39	39	33	11	70
# Funded	17	2	0	2	21	31	31	2	64
S/R	68%	29%	0	29%	54%	79%	94%	18%	63.7%
Avg. (\$K)	\$12.2	\$14.0	0	\$11.0	\$12.2	\$19.4	\$15.2	\$13.0	\$15.8



GSC 14 - DG Results over time

	2008	2007	2006	2005	2004
# News/FTAs	32	28	35	26	31
Ave.	\$12.4	\$14.3	\$12.1	\$13.9	\$13.5
S/R(%)	59%	71%	80%	81%	67.7%
# Returning Successful	90	78	68	65	55
Ave.	\$17.0	\$18.1	\$20.1	\$19.7	\$20.2
S/R (%)	73%	71%	77%	78.4%	94.4%



Discovery Accelerator Supplement – 2008 Competition

Math, Stats, CIS GSCs	Quota	Results
(336) Pure & Applied Math. – A	4	4
(337) Pure & Applied Math. – B	3	1
(14) Statistical Sciences	5	2
(330) Computing & Info. Sci. – A	13	6
(331) Computing & Info. Sci. – B	15	7
Sub-Total (Math, Stats, CIS)	40	20
Total for All GSCs	183	100