

ANNUAL REPORT

2007 COMPETITION

GSC 18

The Evolution and Ecology Grant Selection Committee

April 2007

The numbers and statistics contained in the report do not represent the final and official results of the competition; they are included to help the reader understand the context of the competition. The final and official numbers and statistics are the ones presented to the Committee on Grants and Scholarships (COGS) during their May meeting that followed the competition. Note that the numbers and statistics contained in this annual report should not be used for any other purpose than the *GSC Annual Report*.

Membership GSC 18

Felix Baerlocher (Co-Chair)
Professor, Department of Biology
Mount Allison University

Marc-André Lachance (Co-Chair)
Professor, Department of Biology
The University of Western Ontario

Leah Bendell-Young
Professor, Department of Biological
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Simon Fraser University

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Environment Canada, Saskatoon

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Université Laval

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Claire McAneney
Program Officer
NSERC

Kenn Rankine
Program Officer
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Overview – 2007 GSC 18 Competition

The appendices provide an overview of matters raised by the Committee in relation to the 2007 competition.

The Co-Chairs would like to draw particular attention to the following:

1. GSC 18 continued with the “conference model” implemented in the 2006 competition. Plenary sessions were used on the first day to familiarize new members with the grant review process and also with the adjudication of reallocations and Discovery Accelerator Supplement nominations. All other review sessions were conducted as concurrent sessions. Again, the grant applications, as much as possible, were grouped by theme. The proposals had been assigned to 19 research theme areas (see Appendix 1). Readers moved between research themes as required by their expertise. In 2007 the process ran smoothly.
2. Although the 2006 committee had suggested that a reduction of the number of readers to six might be desirable, we continued with seven readers. One important reason is to facilitate the process of assigning a final funding recommendation that represents the median view of the committee.
3. The addition of one extra half day to the competition, suggested in 2006, provided much needed additional time to deal with comments and other special matters such as the ranking of UFA and Discovery Accelerator Supplement candidates. This also facilitated the organization of the two concurrent sessions, so as to minimize the need for members to move from one panel to another. The Chairs felt that the overall quality of comments was excellent, requiring very little editing, and that some of this improvement was due to the additional time spent by the Committee in Ottawa.
4. Although returning members noted a small improvement in the reliability of the electronic voting pads, a significant amount of time was again wasted this year, when the devices needed to be reset. Further improvements in stability would be desirable. That is not to say that the use of paper votes would be preferable. The clear advantage of direct entry of votes into a computer spreadsheet is the possibility of “ratcheting” award levels at the time of budget rebalancing. The suggestion made in 2006 to consider the use of a secure local network remains one that should be considered.
5. The Committee again expressed much frustration with the need to recommend funding for an increased number of applicants without a commensurate increase in the overall Discovery Grant budget. The 10 per cent effective reduction forced the committee reluctantly to recommend reduced funding for many meritorious applicants. In many instances where the first and/or second internal(s) had recommended a nil award because of the need to be selective, the panel discussion led to a consensus recommendation of funding, albeit at a low level, which resulted in a week-end total that exceeded budget by a sizeable amount. The Committee agreed that a fixed

percentage reduction of all awards was the preferred method of balancing the budget equitably.

6. The 2006 GSC had raised the issue of the degree of emphasis that should be placed on citation statistics or journal impact factors. The clear pattern emerging in 2007 was that some applicants saw fit to include such information in their Form 100 and that the readers should remain free to deal with that information at their discretion. The general opinion was that the actual weight to be given to such matters as numbers of publications, order of authorship, first authorships, journal ratings, etc. varied according to the particular circumstances of applicants and that readers should exercise their best judgement. Similar comments apply to the interpretation of HQP tables and the relevant details given in Form 100. It was felt that it is up to each applicant to make the best possible case, and up to reviewers and readers to interpret the data in a reasonable manner. Similarly, opinions regarding the weighting to be given to each of the four evaluation criteria varied widely among panel members, although a common sense view seemed to prevail. Some individuals worried that budgetary restraints seem to be causing NSERC to assume an increasingly active role in influencing the peer review process itself, specifically as to the weight to be given to each criterion.

7. It was noted that the layout of most applications was more in-line with prescribed formats. It would appear that NSERC's current handling of printing is appropriate.

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Figure 4: Value of Grants Awarded to Renewals (R\$, RF\$)

Appendix 2

GSC 18 2007 Policy Meeting Minutes

February 10, 2007

Present

Co-Chairs:

Felix Baerlocher
Marc-André Lachance

Members:

Leah Bendell-Young
Douglas Bright
André Desrochers
Robert Clark
Stephen Dobson
Guy Drouin
Marco Festa-Bianchet
Glenys Gibson
Cameron Goater
Susan Grayston
Brian Husband
Donald Jackson
Mark Lewis
Asit Mazumder
Dolors Planas
Bernard Sainte-Marie

Group Chair:

Warwick Vincent

NSERC Staff:

Claire McAneney (Program Officer)
Kenn Rankine (Program Officer)
Dave Bowen (Team Leader, Environmental Sciences, Physics and Program Operations Division)
Norman Marcotte (Director, Environmental Sciences, Physics and Program Operations Division)
Isabelle Blain (Vice-President, Research Grants and Scholarships Directorate)

1. Committee's presentation to NSERC via Isabelle Blain

The Committee agreed that the most constructive way to communicate with NSERC administration was to avoid repeating the same frustrations with which everyone is familiar and, instead, to present a concerted and positive means of seeking solutions. As

a preamble, it should be clearly stated that for a number of years, the scientific community in general and researchers in evolution and ecology, in particular, have been disappointed with the level of funding awarded to the Discovery Grant program in general, and to GSC 18 in particular. This unease was exacerbated this year by some items mentioned during our discussion with Suzanne Fortier, President of NSERC. While optimistic, Suzanne Fortier indicated that NSERC is faced with the difficult task of convincing our elected officials that: 1) the Discovery Grant program is indeed funding excellence despite a 70 per cent rate of success for returning applicants; 2) the research funded by the program is relevant to the problems facing Canada; and 3) that funds invested in discovery-type research provide true value-added to the Canadian economy. Suzanne Fortier indicated that NSERC seeks our advice on how to make a stronger case to the Canadian Government. GSC 18 asked Marco Festa-Bianchet to represent our collective views on these matters. A summary of his presentation to Isabelle Blain follows:

a. Researchers in evolution and ecology are important to Canada because they train people to think over the long-term, and can help Canadians avoid the problems caused by short-term thinking (over-fishing, pollution, deforestation, global warming, urban sprawl, and other human misuses of biological resources).

We are very concerned about the dramatic cut in funding to GSC 18 – the budget cut of 10 per cent returns research budgets to the level of five years ago, and with inflation factored in, on average, grants received in 2007 will allow researchers to do 20 to 25 per cent less than five years ago. The consequences will be lower HQP training, less innovation, and lower scientific excellence. It is difficult to conceive how Canada can retain and nurture its many outstanding researchers, including many with Canada Research Chairs (CRCs), that we now take for granted, if we cannot even sustain an already very low level of funding.

b. There are widespread concerns among GSC 18 members over the role of the Committee on Grants and Scholarships (COGS), mostly because of a potential misunderstanding from a problematic interaction with one COGS member. There is an urgent need to reassure members that COGS is not planning to threaten the viability of the Discovery Granted program.

NSERC assured the Committee that COGS has the full interest of GSC 18 and other related committees in mind, and that the views held by a single member are not necessarily those held by COGS as a whole.

c. GSC 18 wishes to reinforce links between NSERC and the Canadian Society for Evolution and Ecology (CSEE) by getting CSEE actively involved in the restructuring exercise planned by NSERC. We hope to explore further the idea of a Canadian Institute of Evolution and Ecology during the Toronto meeting of the CSEE in May 2007, and we invite NSERC's participation. For example, the CSEE might nominate a panel of three to four people that could act as contacts who would get actively involved in the restructuring exercise.

d. GSC 18 wishes to reiterate in the strongest possible terms some long-standing concerns that we believe are shared by the Canadian evolution and ecology research community and probably many other research communities in Canada. We would

strongly support a consolidation of NSERC funding and an increased internal investment in the Discovery Grants, Postgraduate Scholarships, and Postdoctoral Fellowships programs. We are deeply concerned with the fragmentation of Canadian research funding into “targeted” programs and the diversion of scarce resources into new programs or agencies such as the Canada Research Chairs, the Discovery Accelerator Program and, especially, the Canada Foundation for Innovation.

We suggest that there is an urgent need to assess the performance of these different programs. Appropriate measures of the real effectiveness of these programs in comparison to the Discovery Grant program must be devised. Meaningful criteria must be formulated by the international panel; these criteria must take into account the relative visibility of Canadian scientists on the international scene. We are convinced that once Canadian scientific performance, in relation to the amount of money invested, is measured accurately; the Discovery Grants program and, in particular, the science funded through GSC 18 will fare extremely well by any standards.

The training of highly qualified personnel is suffering from cuts to the Discovery Grants program and is not being balanced by expanded funding to other programs that do not promote the same quantity or quality of HQP training.

e. We conclude by conveying our sincere appreciation of the work of NSERC for scientific research in Canada, and we wish to thank in particular all those involved with GSC 18. We are very grateful for the professional support provided by Kenn Rankine and Claire McAneney over this past week.

2. Other discussion among GSC 18 members:

a. With respect to the second year of the use of a “conference” model, GSC 18 members praised the impeccable preparation work of Claire, Kenn, and Sue Dodds for our competition meeting.

b. The orientation session was deemed useful by those who participated either physically or by teleconferencing. Some members suggested that additional guidance on the task of readers (as opposed to first and second internal reviewer) would be useful.

c. Some minor issues were brought up with respect to assignment of proposals as a function of expertise. The importance of filling the expertise spreadsheet in a timely fashion was reiterated.

d. With regards to the mini-budgets, it was suggested that for 2008 all members be entitled to spend part of their FTA mini-budget allocation on RUs, given the increasing number of RUs in the competition.

e. The nominating committee reported that suggested members had been selected from aquatic ecology and limnology, molecular evolution and bioinformatics, and landscape ecology/animal ecology, because these areas were in the greatest need of renewal.

f. Some members expressed the view that applicants should be required to give more detail on the specific role of HQP in the laboratory, as well as citation statistics. These matters did not necessarily reflect a consensus.

g. The RTI subcommittee expressed satisfaction with the procedure recommended for ranking proposals.

h. As a result of comments made in 2006, the policy was adopted, at the beginning of the competition, that comments would be mandatory only when there is a decrease in funding. The Committee interpreted this loosely to mean that comments would be required when funds were reduced by more than 10 per cent. The result of this change was that the overall quality of comments increased. Continuation of the same policy is recommended in 2008.

i. Those who were involved in group information sessions for NSERC applicants agreed that the sessions were well-attended and that the feedback from participants was positive.

j. The Committee thanked Felix Baerlocher and André Lachance for their duty as co-Chairs, in particular for their practice of soliciting comments from all readers of each proposal. The Committee also thanked retiring members Felix Baerlocher and André Desrochers for their valued contributions to the Committee over the past three years.

Appendix 3:

Table 1: Summary of Competition Results – Evolution and Ecology

Note – These are unofficial data. Statistics presented at the May 2007 COGS meeting supersede those shown in Appendix 3.

Discovery Grant Statistics	Totals
Number of Applications:	212
Number of Awards:	157
Success Rate:	74%
% of Overall Avg. Grant (\$29,438):	100%
Average Grant:	\$29,386
Funding:	\$4,613,640

Equipment Statistics	
Number of Applications:	91
Number of Awards:	42
Success Rate:	46%
Total Requested \$	\$3,784,929
Total Awarded \$	\$1,605,405
Funding Rate:	42%

First Time Applicants (FTAs)	Totals	FN	FA	FNA
Number of Applications:	51	36	12	3
Number of Awards:	27	18	7	2
Success Rate:	53%	50%	58%	67%
% of Overall Avg. Grant (\$29438.3552):	76%	74%	88%	54%
% of Budget:	13%	8%	4%	1%
Average Grant:	\$22,334	\$21,678	\$25,864	\$15,880
Funding:	\$603,020	\$390,210	\$181,050	\$31,760

Returning	Totals	R\$	RF\$	RUN	RU
Number of Applicants:	161	87	35	12	27
Number of Awards:	130	84	30	9	7
Success Rate:	81%	97%	86%	75%	26%
% of Overall Avg. Grant (\$29438.3552):	104.80%	121.05%	82.87%	64.15%	56%
% of Budget:	86.93%	64.88%	15.86%	3.68%	3%
Average Grant:	\$30,851	\$35,634	\$24,396	\$18,884	\$16,500
Funding:	\$4,010,620	\$2,993,270	\$731,890	\$169,960	\$115,500

Acronyms (from Peer Review Manual)
FN: First-time new applicant
RUN: Returning unsuccessful FTA
FA: First-time experienced academic applicant
FNA: First-time experienced non-academic applicant
RF\$: First-time renewal applicant
R\$: Second or more renewal applicant
RU: Returning unsuccessful applicant

Groups	Totals
Number of RGPGP	2
New Groups	0
<i>Funded FTA Groups</i>	0
Renewal Groups	2
<i>Funded Renewal Groups</i>	1
Total Groups Funded	1

Reallocations	
Budget Available:	\$95,000
\$ Spent:	\$95,000
Number of Awards:	38
Highest Amount Allocated:(x awards)	\$2,500
Lowest Amount Allocated:(x awards)	\$2,500
Average Amount Allocated:	\$2,500

Figure 2

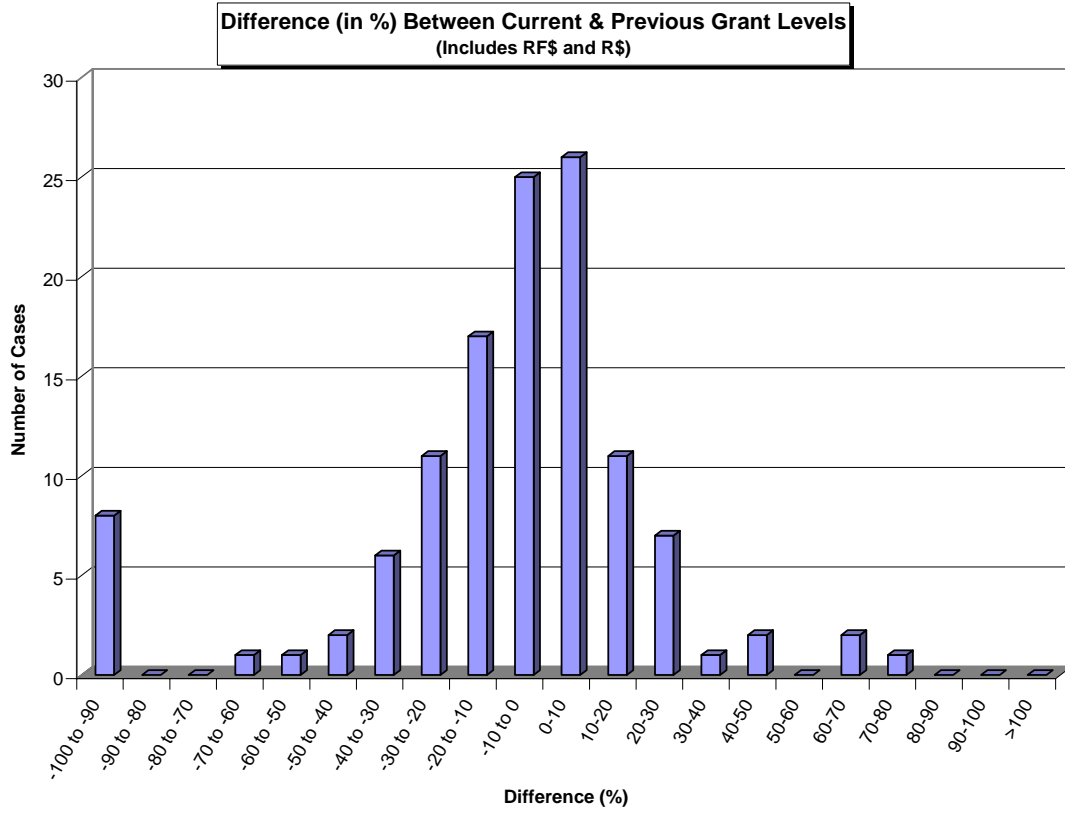


Figure 3

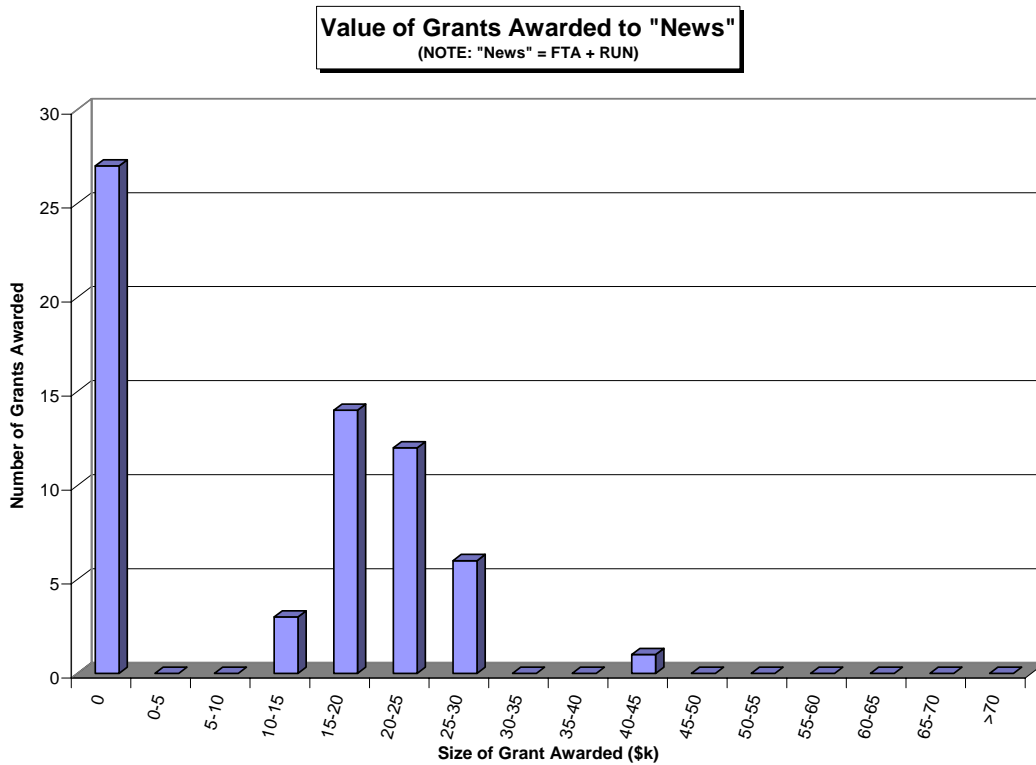


Figure 4

