

## Grant Selection Committee Structure Review

### Response by the Canadian Society for Ecology and Evolution

#### **1. How well does the current GSC structure serve your community or discipline?**

GSC18 has been the main pillar supporting ecology and evolution research in Canada since its inception, and we greatly appreciate its activities on behalf of the research community. In recent years, the expansion of the field has led to some difficulties, especially the increase in workload for committee members. Two remedies have been suggested: to split the committee, or to retain the present structure but modify the review process.

We feel that splitting the committee is undesirable for three reasons. First, the fields of ecology and evolution are closely interlinked, so much so that many proposals cannot be unequivocally assigned to one field rather than the other. Secondly, splitting the fields would tend to discourage interdisciplinary research. Finally, splitting the committee might compromise expertise in the evaluation of many proposals.

Consequently, we recommend that the existing structure be maintained, while the difficulties this entails be ameliorated through the conference system that has been adopted by GSC18 in recent years. This reduces disparities between subdisciplines, and we feel that it might profitably be adopted by other committees. We also suggest that workload can be substantially reduced by restricting the number of readers per proposal. In our experience there is a high degree of concordance among reviewers, and four should be adequate to ensure fair and accurate evaluation.

#### **2. Are there specific research areas that are not handled well by the current system?**

Proposals that fall between GSCs may not always receive adequate or appropriate evaluation. Two examples might be bioinformatics and evolutionary genomics. The

conference model might again resolve this problem by permitting participation by members of two or more GSCs.

We would also like to recommend that some attention should be paid to ensuring that fields with a long history of accomplishment, such as systematics and palaeontology, are adequately served by any revised GSC structure.

**3. Do you see emerging research areas that will stretch the current system, either in terms of workload or because the areas will be outside the mainstream of existing GSCs?**

The most serious problem at present is that the current system is being stretched by the growth of the field as a whole. This has created a situation in which the growth of research, fuelled not only by fundamental enquiry but also by social and economic concern, has not been matched by a corresponding growth in funding. To this extent, the whole of ecology and evolution is an emerging area that is currently underfunded.

We do not consider, however, that there are serious structural problems with the GSC system. This is because the Discovery Grant program is designed to support diversified research, and can therefore respond very quickly to new research priorities.

**4. What are the areas of intersection, overlap or complementarity with other disciplines or GSCs?**

The main overlap is with GSC09, Environmental Earth Sciences. The divorce of ecosystem studies from community and population studies is artificial, and tends to set up barriers where there should be none. We feel that it might be advisable to review the current situation, with a view to exploring the feasibility of bringing all ecological research under a single GSC.

There is also a certain degree of overlap with GSC03, Plant Biology. Some members have reported the impression that this has been created by shopping around: some researchers whose proposals would be suitable for GSC18 have preferred to apply to GSC03 because of its larger per capita funding. We cannot comment on this possibility, but it does underline the current degree of underfunding of GSC18.

**5. How important is the sense of “home” for your discipline within the GSC structure, and could this be provided by another kind of structure?**

We feel that it is very important: there is a rather discrete and well-integrated community served by GSC18 and represented by CSEE. The strong sense of ‘home’ is why unpaid and highly qualified volunteers are willing to spend hundreds of hours serving as members of GSCs. In our opinion, this is largely because the Discovery Grant program supports a very large fraction of the research community, and it might be very difficult, or much more expensive, to operate the GSC system if the participation rate were much lower.

**6. What is your vision of the ideal system for the Discovery Grants program?**

International colleagues almost always view the DG program as superior to the corresponding program in their home country, except in the few areas that are not adequately supported by current funding levels. They point in particular to the security of funding, continuity of labs, fair appraisal of candidates, efficiency of application procedures, and direct funding of research.

There are certain weaknesses in comparison to other systems, however, which could be addressed in order to make the system even better.

- The lack of transparency in identifying priorities for funding in other programs, such as Genome Canada. This would actually work better if it were folded into the DG program.
- Too great an historical component in the overall funding envelope for GSCs. This has the undesirable consequence that funding does not respond sensitively to the differential growth of disciplines. Funding envelopes should reflect the level of activity in the field, which is readily measured through the level of hiring in academic positions.
- Too great an historical component in allocating individual grants. In a small minority of cases, this practice might lead to inappropriate awards. While we support continuity of funding, we feel that the level of award should be as far as possible independent of the previous award, except insofar as awards reflect the quality of the candidate and the research program. We recognize, however, that the remedy for this problem is largely in the hands of individual GSC members.

Respectfully submitted,

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