



Dr Andr ea Benoit  
Deputy Director  
Research Grants  
Natural Sciences and Engineering Research Council of Canada

4 September 2019

Dear Dr Benoit,

**RE: NSERC's Research Tools and Instruments Grants Program**

We are members of the Executive of the Council of the Canadian Society for Ecology and Evolution (CSEE), which comprises more than 700 research scientists in ecological and environmental fields from across Canada. We are writing to provide thoughts and suggestions on NSERC's Research Tools and Instruments (RTI) Grants Program, as suggested by Dr Jeremy Kerr, Chair of the Discovery Research Committee and past president of the CSEE. The opinions expressed here are those of the Council as well as those we elicited from our members at our annual conference held recently in Fredericton, NB.

A grant program like the RTI is absolutely invaluable to ecological, evolutionary, and conservation research in Canada. It is the only grant program available to mid- to late-career scientists for the purchase or, more often, the replacement of critical equipment that was obtained with start-up funds at the beginning of their academic careers. Such equipment is often prohibitively expensive to replace using Discovery grants, and senior scientists are often excluded from CFI grants, which universities use to fund the establishment of early-career researchers.

The falling number of applications to the RTI program is therefore not due to the lack of importance. Instead, a number of issues raised by our members might explain the disillusionment of the ecology and evolution research community with this program. These include:

- The perception (owing to low funding success) that routine pieces of equipment, such as field vehicles, are not deemed 'sexy' enough to be funded, yet these are critical to our research community.
- The fact that equipment that serves one individual is less likely to be funded than equipment that appears to serve a larger group of researchers. This has led to the exaggeration of the declared importance and potential use of equipment for which funding is requested. For example, an application to fund a field vehicle that was described as critical to 12 faculty members was successful, but it is clear that one vehicle cannot be shared among so many people.
- The need for multiple users is a disadvantage to researchers at small universities, who have few colleagues with whom they can potentially share equipment.
- Many highlighted the apparent arbitrariness of funding decisions, with little or no feedback provided for failed applications.

How can the program be improved? Our members suggested that NSERC might:

- Communicate the program expectations, criteria, and eligibility more clearly than is currently done.



- Change the criteria to stop penalising applications made by individual researchers.
- Eliminate the apparent bias against routine equipment, such as field vehicles, that might be widely 'available in the vicinity' but cannot easily be shared; or if there is in fact no such bias, to communicate this clearly.
- Allocate more funding to general programs such as RTI, available to all researchers, to increase the success rate. Many of our members feel strongly that this should be done at the expense of 'special', more targeted programs.

We hope that these comments are helpful. The RTI program is essential to our research community. We feel strongly that it should continue and be enhanced, but it does need to be structured to address the real needs of the Canadian research community, which is facing serious challenges in maintaining and renewing routine but critical equipment.

Yours sincerely,

Dr Isabelle Côté, President  
Dr Stephen Heard, Vice-President  
Dr Albrecht Schulte-Hostedde, Secretary  
Dr Yolanda Morbey, Treasurer

On behalf of the CSEE Council and Membership