

Trottier Institute for Science and Public Policy

Martin Grant, Dean, Faculty of Science. 16 April 2014.

1. Introduction and rationale

An integral academic duty is service, service which is informed by and makes use of our academic mission of teaching and research. In a University, we recognize and accept a duty to spread knowledge to the world through outreach and engagement in public policy. In particular, the application of science to public policy is one of the ways scientific knowledge is disseminated, and an area in which our approach to the creation and in particular the validation of knowledge must play a larger role. Being a great University, or aspiring to be one, confers upon one not only the praise and respect of colleagues at other institutions, but it further confers upon one responsibility: the responsibility to disseminate our approach. In particular, promoting the application of rigorously tested ideas and methods to the apparent anarchy which can sometimes drive public policy in science.

Through the visionary support of Lorne Trottier, this mission will be undertaken by the Trottier Institute for Science and Public Policy. The Trottier Institute will be committed to developing and promoting policies that expand the contribution of science to human welfare. Its aim is to enhance the positive contribution of science and technology to society. The mission is two-fold. Firstly, to provide leadership in advancing science-driven policy, and to prepare future generations of leaders for this responsibility. This leadership will come from scientists themselves, whose research will be funded based on ability to affect matters of public policy. Secondly, with the help of the Office of Science and Society, the Trottier Institute for Science and Public Policy will help improve the ability of non-scientists to make decisions on issues that involve science, medicine, and technology, through public education and outreach. The Institute will coordinate activities with other related initiatives, including in particular, the Trottier Institute for Sustainability in Engineering Design in the Faculty of Engineering, and the Wolfe Chair in Scientific and Technological Literacy in the Faculty of Arts.

2. Trottier Professors

One way the Institute will enact this mandate is through the Trottier Professors which are Fellowships in Science and Public Policy. These are academic awards that enable the University to encourage a policy element in scientific inquiry conducted by world-class scholars at the University. Such Fellowships will rotate at intervals of approximately two years, and are open to scientists in all Faculties

throughout the University.

The Fellowships act to give a research boost to scientists doing excellent work, where that work will have impact or potential impact upon public policy. Letters of intent are welcome from scientists or teams of scientists within the Faculty of Science, or any other Faculty at McGill. The intention of the Fellowships is (a) to recognize and support excellence, (b) to recognize and support scientific leadership, particularly the collaborative leadership of a research agenda, (c) to provide seed money for emerging research directions, including those of an interdisciplinary nature, and (d) to have impact or potential impact upon public policy. As such, the Fellowships are consistent with the Faculty and University strategic plans. The program is structured in parallel to Science's Fessenden Professor program for commercialization: letters of intent are requested when the Trottier Public Science Policy Fellow endowment has sufficient funds to plausibly support Fellowships. As such it functions as a "Venture Capital" (VC) fund, albeit a VC fund devoted to public science policy impact. It is expected that most Fellowships will be for no more than two years in duration, and that the amount of total funding will be of order 50K-100K of research funds, typically to provide partial support for graduate student funding. It is expected that between one to three Fellowships will be approved per round of proposals.

In accord with the terms of the gift, the first three Professorship appointments have been made to Professor Lea Berrang-Ford (Department of Geography, Faculty of Science), Professor Elena Bennett (McGill School of Environment and Department of Natural Resource Sciences, Faculty of Agricultural and Environmental Sciences), and Professor Catherine Potvin (Department of Biology, Faculty of Science).

3. Governing Board

A Board will lead the Trottier Institute. The Board consists of the Director, the Dean of Science, the Director of the Office of Science and Society, a representative of the Trottier Family Foundation, a previous Trottier Public Policy Fellow, and other representatives as named by the Dean. The Director will be responsible for, amongst other activities, coordinating the calls for proposals for the Trottier Professors, and identifying appropriate reviewers for applications to provide advice to the Dean on these appointments. The first interim Director will be Professor Vicky Kaspi, Trottier Chair in Astrophysics.

The reviewers will be drawn from a college of public science policy experts inside and outside of academia. The interim Director will act to begin creating the college, which will consist of, at least, current and previous Trottier Public Science

Policy Professors, the Wolfe Chair in Science and Technological Literacy, and the Director of the Trottier Institute for Sustainability in Engineering Design.

4. Coordination with outreach activities

In accord with the terms of the gift, the Institute will coordinate outreach activities in Science, and ensure good coordination with other outreach activities at McGill and elsewhere. Science Outreach at McGill disseminates our scientific expertise to a wider community through programmes and activities such as talks, lab visits, family workshops, in-school presentations, and documentary films. These activities within Science include, at least, the previously mentioned activities at the Office of Science and Society, the Astrophysics outreach program, the program at the Redpath Museum, and the “inreach” program to support staff, Science Talks about Research for Staff (STARS).

Outreach is a responsibility of service. Further it is one way we express our values of excellence and respect for achievement — at the international level — within the local community. Outreach connects the public to the fun and excitement of science at a leading research university, shares our research and lets us discuss scientific issues in our community, and cultivates an interest and appreciation of science. It is a way to show how our research-intensive university contributes to society, by making science education accessible and interactive for students, teachers, and the community. This is well expressed by the Lorne Trottier Public Science Symposium, established in 2005, whose goal is “to inform, inspire debate and raise public awareness on contemporary issues confronting society today” as well as by the parallel annual Miniscience series endowed by the Trottier Family Foundation which provides an educational outreach program on topics of interest and importance over seven weeks, designed to offer the public an insider’s view of science.

Our outreach programs provide us with a platform to go forward. In particular, they provide the strong foundation to make the leap from outreach to public policy, in partnership with the Humanities. It is a long-term grand challenge to address the re-integration and re-convergence of the Sciences and the Humanities.

5. Coordination with undergraduate research program

Finally, the Institute will act to administer the undergraduate research activities in the Faculty of Science, established in 2005, including the summer undergraduate research award program, the annual undergraduate research conference, and related academic and outreach activities. These initiatives have been justifiably popular with students and staff, they are key to our future success as a Fac-

ulty and as a University. activities. Appropriate administrative resources will be allocated from the Faculty to facilitate this.

This is in recognition of the support from the Trottier Family Foundation to provide a matching fund for the award of Summer Undergraduate Research Awards. Beyond facilitating the activities of the Undergraduate Research Office, the Institute will introduce programs for involvement in outreach and public policy impact for undergraduates, graduate students, and postdocs, and work towards this involvement being a routine part of their McGill experience.