

## Are charities and foundations the new arbiters of research funding policy?

By Brian Wixted and Adam Holbrook

With the recent Jenkins report and the attention business R&D gets in the media and in academia, you'd be forgiven for thinking that there are only two sources of R&D funding — government and business. However, there is a third source and it provides roughly as much money to universities for research as business: actually quite a lot more in 2008-09. Further, this funding comes directly from you and me and most other Canadians through digging in their wallets for cash. The non-profit charities and foundations are the orphan of science policy; too often ignored and forgotten by policy makers but not by most average Canadians.

Canada has had many successful S&T policy initiatives, one of which was the development of formal research networks such as the Networks of Centres of Excellence (NCE). One of the elements of an NCE is that they link researchers with stakeholders — individuals, associations, and institutions who are closely linked to the research problem but who do not actually perform research.

Successful NCEs interact closely with their stakeholders. Charities operate similarly: as an example, health charities represent individuals who have a particular health problem and raise public awareness about the need for research on that health issue. Frequently, these charities have campaigns designed to raise funding for research directly from the public. When an individual makes a contribution — whether a single loonie or millions of dollars — the individual is making a research funding decision that reflects their own personal priorities, not those of a governmental funding agency or a large enterprise.

According to Statistics Canada, "private-non-profit" institutions, which are often charities and/or foundations (C&Fs) funded about 3.3 % of total R&D expenditures in Canada in 2009. In that year they funded \$993 million for R&D (by contrast, expenditures by the Canadian Institutes of Health Research in the same year were about \$980 million). It is the fastest growing R&D funding sector in the Canadian economy, increasing between 2004 to 2009 by approximately 34%. Furthermore, contributions from C&Fs often have a strong influence on funding decisions made by other funders, particularly the federal granting agencies.

So what is the role of the non-profit sector in the Canadian research system? How much influence do they have on the allocation of

research resources? In policy studies of research systems, the role of direct funding from individuals rarely rates attention when compared to government agencies. Research literature on the economics of technology and innovation has come to favour business innovation over public sector involvement and the significance of the growth in direct funding by stakeholders has been lost.

Science, technology and innovation studies have focussed on the role of the three institutional players: business, government and universities (the "triple helix"). Indeed, because of the widespread perception of being on the receiving end of others' priorities, some C&Fs are formed to explicitly influence the direction of research funding.

The term democratization is commonly used in connection to innovation as a reference to user community involvement. The democratization of science, on the other hand, tends to be defined in terms of the public's involvement in the acceptance of technologies (particularly controversial technologies). Neither of these factor in the involvement of the public through direct action (i.e. money contributed) for research prioritization. The role of C&Fs and how they influence overall research spending priorities is something which is poorly understood at present, yet which has important public policy implications.

Given the number of environmental and medical C&Fs, particularly those that involve the general public through participatory events such as walks, runs and cyclethons which result in donations to specific research funds, this should be an area of interest to policy analysts and managers of research funding agencies. But surprisingly, the non-profit sector has been largely overlooked for its role in the Canadian national system of innovation. Given the magnitude

of these C&F funds and the impact they have through leverage and matching of public research funding, it is essential we have a better understanding of the role of the public charities and foundations in setting the research agenda in Canada. We do know there is leverage but it is hard to calculate how much.

Even so, we do know that 'voting' by the public for specific research has become significant in Canada and a number of other countries. C&Fs are a significant feature of other national innovation systems such as Australia, the UK and the US.

There are many reasons for C&Fs being overlooked in the research systems of advanced economies. Not so many years ago their funding base was small, but this is no longer the case. Secondly, the emphasis on private sector innovation has obscured the changes in the funding base of the sciences as it has become more fashionable to examine market outcomes rather than funding structures.

### POLICY WORK NEEDED

Because much of the funding of the C&Fs are channelled into the institutional system through partnerships with granting councils and primarily directed towards basic science, rather than applied science, the perceived role of the C&Fs is lessened. Their funding choices are not always peer reviewed in the academic sense. All of this makes it urgent for policy analysts to better understand the role of these organizations and their successful messaging to society.

If the federal government wishes to leverage its research expenditures, it needs to understand the role of C&Fs. At the same time, the further one moves away from medical and environmental causes, the fewer non-profit research champions there are. With less noise probably goes less funding. In this context what future is there for the social sciences?

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