Canadian institute seeks to secure its financial future

The Canadian Institute for Advanced Research promotes excellence in research. But as a funding agreement with the government is set to expire, it must secure a firm financial base if this success is to continue.

Colin Macilwain

CIAR

[BANFF, CANADA] The Canadian Institute for Advanced Research (CIAR) last week held the second Congress of its 200 fellows and associates from Canada and around the world.

But Fraser Mustard, the fiery former physician and medical researcher who founded CIAR 17 years ago, despite hearing how the institute has promoted outstanding scientific progress, pronounced his own role as having been a failure in one important way.

"I've failed because we couldn't develop an endowment basis for the institute," Mustard told the meeting, reflecting on the perennial struggle that this "institute without walls" has faced in raising money to cover its operating costs. "The institute has to have an endowment to have any chance of surviving over the long haul," says Mustard.

The Canadian government is now considering a proposal from CIAR under which it would match the money the institute is able to raise from private sources and from Canada's provincial governments.

Research programmes

Kevin Lynch, deputy minister of Industry Canada, says it is too early to say how this proposal will be received. But, given the institute's research track record and the leverage it has exercised by distributing a little money to key people in multidisciplinary, geographically scattered groups, it has a reasonable chance of being accepted.

CIAR pays a small amount of money to the universities that employ its fellows and associates in exchange for a lightening of their teaching load. This has enabled them to devote more time to research, and especially to collaborate with the other members of their programme. They also receive money to enable them to meet regularly.

The approach is well suited to Canada's circumstances. Undergraduate teaching loads are heavy in Canadian universities, and excellence in the universities is widely distributed. The establishment of 'centres of excellence' tends to be politically divisive. And the country's small scientific élite knows it must work closely with scientists overseas, including the large Canadian diaspora in Europe and the United States.

Dupré: under pressure to broaden institute's role.

The approach has provided a substantial boost to most of the eight programme areas that CIAR supports. Paul Hoffman, for example, a geologist formerly with the Geological Survey of Canada and now at Harvard University, says that CIAR's Earth system evolution programme "was extremely important" in expanding his work in plate tectonics to produce his celebrated 'snowball Earth' thesis, which holds that the Earth suffered a series of violent ice ages 700 million years ago.

Franz Lang, a biochemist at the University of Montreal, says his fellowship in CIAR's evolutionary biology programme helped to propel him into the élite circle who publish in top journals and receive substantial research grants. The programme allows them "to compete with the most prestigious and best-funded American universities," says the programme's director, Ford Doolittle of Dalhousie University, Nova Scotia.

Some of the research programmes merge social sciences with hard sciences, and reflect a Canadian perspective on social issues. The programme on population health, for example, has charted the importance of social factors as markers for disease, and shows that Canadian social cohesion does more for public health than the far larger per-capita expenditure of the United States on medicine.

CIAR has succeeded in establishing pre-eminent, internationally networked groups, but it has struggled to secure a firm funding base. It relies on wealthy individuals and provincial governments — chiefly that of Ontario — for its operating funds.

Under an agreement that expires next March, the Canadian government provides Can$1 (US$0.68) for every Can$2 raised outside, bringing CIAR's annual income to around Can$10 million. Financial pressure almost closed it in 1994, and it could face the same situation when the private donations that came to its rescue expire.

The institute is also ageing, leading to tensions between old programmes and new ideas. Some scientists with long-standing links with CIAR argue it is in danger of losing its way under the direction of Stefan Dupré, a political scientist from the University of Toronto, who replaced Mustard in 1996.

They fear that it will embark on 'sexy', problem-solving exercises in applied science, and lose sight of its goal of supporting the best people in their quest for basic knowledge. The 30-strong CIAR research council is split on the question, according to one of them.

A university without walls

Carolyn Tuohy, the deputy provost of the University of Toronto, who recently led a study into how CIAR should deal with its established programmes, alluded to these tensions in an open discussion on CIAR's future: "Are we becoming a university without walls, in more ways than one?" she asked.

CIAR programmes are supported for five-year periods, and some participants say that groups achieve most during the second or even third five-year period. But Howard Alper, vice-rector of research at the University of Ottawa and a member of the CIAR research council, asserts that "it is crucial that sunset clauses be put in and carried out".

The research council has rejected that idea, says Dupré. Officials hope that some programmes will evolve into self-sustaining research centres with other sources of support. It may also phase out the salary support on its mature programmes, while continuing to pay for meetings and travel, enabling more new programmes to be established.

CIAR may also take steps to address what Lorna Marsden, the president of York University, Ontario, bluntly termed its "white, male, club-like atmosphere". But she hastily added that this had to be done while maintaining "the naked élitism that is CIAR".

Participants in the congress called on Dupré to raise CIAR's public profile and to broaden its role in education and in solving problems of public policy, such as those surrounding genetically modified foods. Tom Brzustowski, president of the Natural Sciences and Engineering Research Council of Canada, said CIAR could seek to advise the government on scientific matters. "There is a great deal that this programme has already taught the rest of research in Canada," he says.

But most participants seemed to agree with Bill Unruh of the University of British Columbia, a former director of the CIAR cosmology and gravity programme. To powerful applause, he called for CIAR to stick to its strengths — and support basic research. □

© 1999 Macmillan Magazines Ltd