## **TECHNOLOGY TRANSFER**

## **NSF Balks at Grants to Entrepreneurs**

To Congress and the Clinton Administration, it is a modest effort to help launch high-tech enterprises. But to the National Science Foundation (NSF), it is a \$1 million raid on the agency's budget, and top NSF officials are balking, at least for the time being.

The focus of the dispute is a law enacted last fall that authorizes five federal research agencies to start a pilot project aimed at helping academic researchers commercialize their discoveries. The program, Small Business Technology Transfer Research (STTR), was modeled after an effort begun in 1982 catering to high-tech small businesses. Like that program, STTR would be funded by a small tax on the research budgets of each participating agency: 0.05% the first year, rising to 0.15% after 3 years.

Under the program, successful applicants can receive up to \$100,000 for 1 year to prove the feasibility of their idea, followed by a second award of as much as \$500,000 for 2 years to design and make prototypes of the new process, product, or technology. Academics must join forces with a small business in developing a truly collaborative proposal that spells out the contribution of each party, how intellectual property rights will be apportioned, and other issues. Four of the five agencies—the National Institutes of Health (NIH), the National Aeronautics and Space Administration, and the Departments of Defense and Energy-have already developed plans for implementing the \$25 million program. NIH, for example, hopes to put out a solicitation next week\* that asks for proposals by 1 December to compete for the \$4 million it expects to have available in 1994.

But don't look in the mail yet for anything from NSF, the fifth agency Congress designated. On 15 July, NSF's acting director, Fred Bernthal, wrote to four key congressional supporters of the project that, "given NSF's projected limited resources," the \$1.2 million program could not be started in fiscal year 1994.

The response stunned Congress and the Clinton Administration, which sees STTR as an important part of its campaign to use science and technology to create jobs and generate wealth. In May, John Gibbons, the president's science adviser, had told Congress that STTR was one of several programs "designed to provide more federal support for commercial R&D," adding that all five agencies "are in the process of implementing this program."

So what's NSF's problem? After all, the amount involved is a tiny part of its \$3 billion budget. And it's not that NSF doesn't like the idea of helping academics find out whether an idea has commercial potential, since in 1991 NSF itself proposed something almost identical to STTR, called the Cooperative University Innovative Research program. That program, scheduled for only \$420,000 in its first year, bit the dust after Congress cut NSF's overall budget request, but NSF officials say that it planted a seed from which the STTR program grew.

The real reason for NSF's intransigence, say congressional aides, is that NSF, like most federal agencies, hates being told what to do by Congress, especially if the orders aren't accompanied by a check. For the record, however, NSF officials say instead

that any tax on the agency's hard-pressed research budget is undesirable. "We had to ask ourselves: 'Does this activity represent a barrier to other initiatives already under way?' " explains Donald Senich, director of NSF's division of technological innovation.

But NSF is part of the executive branch, and it's tough for an agency—even one with a temporary director appointed by a Republican—to buck its political bosses. Bernthal's letter generated a response from the White House, urging NSF to rethink its position, and NSF officials now acknowledge that the final decision rests with its new director-designate Neal Lane, who has declined to discuss policy matters until he is confirmed by the Senate.

The betting is that Lane, now provost of Rice University, will quickly adopt the party line and embrace STTR. Senich says that his office could put out a solicitation "within a month of getting the OK" to proceed.

-Jeffrey Mervis

SCIENCE IN CANADA -

## **Agency Head Quits, Warning of Cuts**

The president of Canada's National Research Council (NRC), the country's network of 19 federal research institutes, resigned late last month, almost a full year before his 5-year appointment was to expire. The move follows several years of NRC budget and staff cuts. And with more cuts to

come, some insiders say the labs' research role—employing approximately 3000 people—will be seriously diminished.

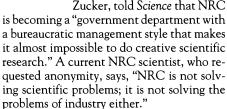
In a 26 August letter to NRC employees, Pierre Perron, a 54-year-old metallurgist who has run the NRC since 1989, said he would leave his post as soon as the government named a successor. He said that the agency is currently developing a long-range operating plan, and he felt that a new president, who would be charged with implementing the plan, should be involved in its design.

But his letter went on to warn staff of serious cutbacks in the offing, and indicated that he believes these reductions are unwarranted. Perron told employees they would face budget cuts of \$9 million (Canadian) by April 1995 and a further reduction of between 10% and 15% in the operating budget by the year 2000; the NRC's current operating budget is about \$248 million. "Our government should not weaken its already anemic support of R&D through retrenchment and cutbacks," Perron wrote. "Unfortunately, the overwhelming preoccupation with the rate of growth-and the size of our national debt

often clouds these important considerations."

Ironically, Perron has already presided over deep reductions in his agency. During his tenure, the NRC staff has been slashed by 10%. Moreover, the agency was reorganized in 1990, replacing its university-like academic divisions with institutes focused more

on applied science, such as aerospace and machinery research. Most recently, this past June, the 40-member protein structure and design group at NRC's Institute for Biological Sciences was disbanded. Perron had said the agency wanted to concentrate resources in other areas, but critics contend that the group was bringing in 70% of the institute's external revenue through contract research. A former group member who was reassigned, biologist Michael Zucker, told Science that NRC



Perron's successor is clearly going to have a tough job rebuilding morale—whether or not the prediction of further cuts is borne out.

-Douglas Powell



Out in Ottawa. NRC chief Pierre Perron has resigned.

Douglas Powell is a free-lance science writer in Guelph.

<sup>\*</sup> For information about submitting proposals to NIH, contact MTL, Inc., 13687 Baltimore Ave., Laurel, MD 20707; (301) 206-9385 (phone); (301) 206-9722 (fax).