

genetic information," says Hideaki Sugawara, an informatics specialist at Japan's National Institute of Genetics in Mishima. Adds Raymond Cypess, president of the American Type Culture Collection (ATCC) in Manassas, Virginia, which holds over 78,000 material samples, "[the centers] are really information resources."

Accordingly, meeting participants strongly backed the creation of what Wellcome Trust's Doyle calls "a virtual biological resource center." The idea is to put online all the genomic and functional information on the holdings of individual collections, with search capabilities for researchers worldwide. But there are daunting obstacles, chief among them the many different database and classification standards already in use.

Aside from informatics, curators are also struggling to find the right balance between unnecessary duplication of holdings and the need to keep key strains at each center for logistical and strategic reasons. There is also debate over whether a self-sustaining not-for-profit corporation, such as the ATCC, or a publicly funded institution, such as is common in Europe, offers a better model for the long-term viability of a collection.

Participants don't expect the OECD task force to come up with all the answers. But Doyle says he'll be satisfied if the effort contributes to "the future stability of culture collections."

—DENNIS NORMILE

CANADIAN BUDGET

Health Research Gets Fundamental Overhaul

OTTAWA—It's rare for the head of a major government research organization to applaud politicians for abolishing his agency. But for Henry Friesen, president of the Medical Research Council (MRC) of Canada, last week's announcement that the MRC would be replaced in a year's time by a new Canadian Institutes of Health Research (CIHR) marks a major step forward in his effort to fundamentally change the nature of Canadian biomedical and health research.

Friesen first proposed CIHR as a way to create a national network of "virtual" research institutes. His hope was that the concept might persuade the government to pump more money into health research (*Science*, 8 May 1998, p. 821). Now the idea has emerged as a key element in a "health and welfare budget" that Finance Minister Paul Martin unveiled last week. That budget, for the fiscal year beginning 1 April, takes advantage of a projected surplus to commit \$325 million more for a grab bag of research initiatives that includes bolstering Canada's space program and expanding programs to renovate aging academic labs and

foster collaboration with industry.

An elated university community is praising the CIHR initiative, which would build on work at the country's 16 academic health centers. Like the MRC, the CIHR will be in the business of issuing extramural research grants. But the science it supports will encompass more health services and population-based research than did its predecessor, which focused primarily on biomedical research.

Through external advisory boards, Canadians will have a greater say in determining the type of projects to be supported, says Association of Universities and Colleges of Canada President Robert Giroux. "It's also coordinating and maximizing what's being done in all areas," he adds. Canadian Medical Association President-elect Hugh Scully sees CIHR as a shot in the arm for the entire Canadian health care system, and University of British Columbia President Martha Piper notes that "being able to network our brightest minds across many labs and institutions is really quite strategic."

But while the expectations for CIHR may be great, the initial funding is relatively modest and falls well short of the \$325 million-a-year boost in health research funding that proponents had requested during a year-long campaign. When the CIHR opens its doors next year, it will receive \$219 million, a \$39 million supplement to MRC's base budget. An additional \$72 million would come in fiscal year 2001–02. Friesen, who is in line to head the new institutes, says that the government is telling researchers "to walk

before we give you sufficient funds to run at top speed."

Indeed, the next 12 months will be anything but a stroll in the park for CIHR. A task force appointed by Health Minister Allan Rock and headed by Friesen will debate how the organization will be structured, where institutes will be based, and what they will concentrate on. It will also decide whether to roll under the CIHR umbrella roughly \$70 million a year in health research now being conducted by the Natural Sciences and Engineering Research Council (NSERC) and the Social Sciences and Humanities Research Council. Federal officials anticipate a year of "immense" and "intense" negotiations.

University administrators also give thanks for a \$130 million boost to the \$520 million Canada Foundation for Innovation, which this spring expects to award its first major grants for projects aimed at rejuvenating an aging research infrastruc-

ture (*Science*, 28 February 1997, p. 1256). CFI President David Strangway says he hopes the new money will generate "more imaginative" applications. The government also gave the Networks of Centers-of-Excellence program a 65% raise, to \$50 million. NSERC President Thomas Brzustowski said the monies will allow for as many as eight new centers linking researchers across campuses in joint projects with industry.

NSERC itself received an unexpected \$16 million increase in its \$305 million budget. The new budget also includes \$156 million more over 3 years for the Canadian Space Agency, which had threatened to withdraw from long-term participation in the international space station. The government has promised to stabilize its budget, now \$220 million but falling rapidly as several projects conclude, at \$195 million.

Ottawa was less responsive to a proposed 5-year, \$175 million national genomics initiative (*Science*, 3 July 1998, p. 20), which finance officials nixed after deciding that it lacked "maturity." And it gave the National Research Council only \$3 million of its \$16 million-a-year request to recover from 3 years of budget cuts (*Science*, 18 September 1998, p. 1781). —WAYNE KONDRIO



Still in charge. MRC's Henry Friesen is in line to lead new Canadian health institutes.

TO YOUR HEALTH

Increases for health and medical research figure prominently in Canada's new budget. The beneficiaries include:

Program	Increment
Canada Foundation for Innovation	\$130 million for infrastructure grants
Networks of Centers-of-Excellence	\$20 million
Medical Research Council	\$18 million
Social Sciences & Humanities Research Council	\$8 million for health and general grants
Natural Sciences & Engineering Research Council	\$21 million for health and general grants
Canadian Space Agency	\$27 million for ongoing operations
Canadian Health Services Research Foundation	Two endowments, totaling \$40 million, for health and nursing research
Canadian Institute for Health Information	\$62 million for information projects