RESEARCH FUNDING

Vaccine network surprised by funding cut

A federal decision not to renew a $34-million grant to the Canadian Network for Vaccines and Immunotherapeutics (CANVAC) had nothing to do with the quality of its research, says the executive vice-president of the Natural Sciences and Engineering Research Council (NSERC).

The Network of Centres of Excellence (NCE) decided in June not to renew funding for the network of 75 Canadian research teams that are developing vaccines for cancer, hepatitis C, HIV and emerging viruses such as SARS. The NCE funding is administered by NSERC, the Canadian Institutes of Health Research, the Social Sciences and Research Council of Canada and Industry Canada.

"Even if the research is excellent, a network is more than just that," says Nigel Lloyd, executive vice-president of NSERC. Network applicants are also judged on their ability to develop highly qualified personnel, establish partnerships, facilitate knowledge and technology transfer and manage the network.

Applicants have to satisfy every criteria, says Lloyd. "There has to be a really efficient management of the network and it has to be making a contribution to the potential user community as well as just the scientific community."

Of the 3 research networks that applied for renewals in 2006, the NCE funded only the Canadian Stroke Network. AquaNet, an aquaculture research network based in Newfoundland, also lost funding.

The decision to cut CANVAC's funding came as a surprise to many in the vaccine research community, given the 6-year-old network's early successes, which included helping to develop preliminary vaccines against the Ebola and Marburg viruses, identifying key immune factors associated with early stages of SARS and beginning the first Canadian clinical trial for a therapeutic HIV vaccine.

"We are losing opportunities to be first on the map, the first to test these vaccines," says Dr. Michel Klein, CANVAC's executive director.

Klein believes the NCE did not think CANVAC was filing enough patents or commercializing discoveries quickly enough to justify the government's investment. "Not supporting vaccinology is a very short-sighted view because prevention is going to be the medicine of the future and clearly vaccines have been one of the greatest successes of medical history," says Klein.

Outcomes, and the length of time that it takes to develop a working vaccine, are part of the assessment, Lloyd acknowledged. "That's obviously a subjective assessment by the selection committee," he says. All 3 applicants could have been funded if they met the NCE criteria, he added. "But the judgment was that only 1 of them met the extremely high standards that we had set."

The specific area of research involved was not a consideration, Lloyd says.

NCE's emphasis on criteria other than research excellence fuels an emerging debate that recently saw 40 prominent scientists accuse the Canadian government of placing too much emphasis on the requirement that researchers obtain co-funding from industry and other sources. In a letter published in *Science* (2005;308:1867), the scientists urged Canadian governments and scientists "not to succumb to the superficial allure of co-funding but rather to evaluate and fully fund research on its own merits."

Canapress

Without CANVAC, Canada may lose ground in developing vaccines.

Arthur Carty, the science adviser to Prime Minister Paul Martin, responded (*Science* 2005; 309:874-5) that only 22% of total expenditures from all federal granting bodies required co-funding. But he also pointed out that accountability and fiscal management are important in publicly funded science. "Scientific merit is not necessarily the sole determinant of success," Carty wrote.

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Nobel laureate John Polanyi has also entered the debate, accusing Canada of over-managing science. "Excellence is, as all acknowledge, a scarce resource," Polanyi says. "If one selects science on the basis of other criteria than that of scientific excellence, it can only be by compromising this indispensible criterion. The cost to the nation of doing that is not worth the nebulous gain. Yet we do it."

Ironically, the NCE's decision will likely weaken researchers' ties with industry.

CANVAC had negotiated arrangements with several pharmaceutical companies to conduct clinical trials in Canada, but those companies will now go elsewhere, Klein predicted, as may some of the researchers Canada has succeeded in attracting and retaining in this field. "You're going to be left with independent investigators doing their own investigating in their own labs," says Klein.

Sanofi pasteur says some of its agreements to test vaccine concepts developed by CANVAC researchers will be affected. Jim Tartaglia, the company's vice-president of research and development, says it's "too early" to know the complete impact of the funding cut, but the network may not be able to operate its new non-human primate facilities in Montréal and immunological monitoring infrastructure, in which Canada just invested $15.7 million.

The decision also raises questions about a national laboratory to monitor and analyze the immune status of patients at various stages of a disease and their immune response to various vaccines. CANVAC was going to administer the laboratory.

Klein says he plans to return to Europe when his mandate as CANVAC's executive director expires. "The environment is not right [in Canada] to make vaccines. Clearly someone at the top does not understand what it requires to be competitive in vaccinology." — *Laura Eggertson*, CMAJ

WAIT TIME ALLIANCE

Benchmarks for "scheduled" cases unwise, experts say

Setting wait-time benchmarks for "scheduled" cases may mean those most in need don't get priority treatment, say experts about a recent report from the Wait Time Alliance.

The Health Canada-funded alliance, comprised of 6 medical specialty associations and the CMA, released its final report Aug. 10 (www.cma.ca). Based on focus groups, a national opinion survey and meetings with key people, the alliance recommends maximum permissible waiting times for certain radiological and imaging procedures, joint replacement, radiation therapy, cataract surgery, nuclear medicine and certain cardiac services.

Wait time maximums are defined for "emergency," "urgent" and "scheduled" care. The report acknowledges that delays most frequently occur with scheduled cases, which are defined as involving "minimal pain, dysfunction or disability."

But experts have been quick to question the wisdom of setting target waiting times for this broad category of patients.

David Hadorn, the former research director of the Western Canada Waiting List Project commends the alliance for its "very useful" work, but says "We need a more sophisticated [urgency priority system] in light of the realities." He questions whether "scheduled cases" should even be on the list. "The gap between 'minimal' and 'unstable' is large and wide — and unaccounted for in this work."

This priority system "creates an unhealthy tension between treating according to need, and treating according to time on the list," says Dr. Gordon Guyatt, a professor at McMaster University in Hamilton.

Norway, Denmark and Sweden have all tried and abandoned benchmarks, he says.

Guyatt says Canada needs coordinated access to procedures with long wait times, such as the system for cardiac care in Ontario, which ensures the sickest patients get treated first.

The problem with setting wait-time benchmarks, say both Hadorn and Guyatt is the paucity of data concerning the effects of waiting. Without this data, wait times are arbitrary, says Hadorn.

The alliance report acknowledges this knowledge gap and asks for an unspecified amount to increase research.

The alliance also wants $1 billion for a national health human resources strategy aimed at self-sufficiency, and $2 billion for a Canada Health Access Fund to reimburse patients for out-of-province or out-of-country care. This $3 billion is in addition to the $5.5 billion federal Wait Times Fund.

"Let's figure out how the [$5.5 billion] should be spent" before adding more money, says Saskatoon health analyst Steven Lewis.

The alliance wants federal and provincial governments to establish wait-time benchmarks by the end of this year and to set reduction targets by Mar. 31, 2006, which is a year ahead of the governments' current schedule.

"The Supreme Court [Chaoulli] ruling has increased the speed of the treadmill," says CMA President Dr. Ruth Collins-Nakai. "If the provinces don't provide reasonable access to medically necessary services then it's appropriate for patients to buy third-party services." — *Barbara Sibbald*, CMAJ

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