Strategic Planning for Oral Health Research: CIHR's Institute of Musculoskeletal Health and Arthritis

ithin the structure of the Canadian Institutes of Health Research (CIHR), the federal agency responsible for health research, 13 individual institutes set strategic priorities to promote programs that will foster research excellence aimed at improving the health of Canadians. Together, the 13 institutes account for only 14% of CIHR's budget. Therefore, they must be highly selective in the programs that receive their support and very dedicated to partnering strategic research projects with each other and with stakeholders, such as non-governmental foundations and corporations. In lay terms, the institutes need to be very clever at leveraging a significant portion of institutional funds to get the biggest bang for their budgetary buck.

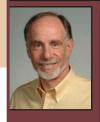
Oral health research is one of the 6 research foci nested within the Institute of Musculoskeletal Health and Arthritis (IMHA), along with arthritis, bone/mineralized tissue, muscle, skin and musculoskeletal rehabilitation. During its first few years the inaugural scientific director, Dr. Cyril Frank, and the institute advisory board (IAB) developed 3 research priority areas in which investigators in the 6 foci could find common ground for enriched collaboration: 1) tissue injury, repair and replacement; 2) physical activity, mobility and health; and 3) pain, disability

and chronic disease. Obviously, research that resonated with both oral health practitioners and researchers was concentrated under the first and third research areas. During CIHR's first 6 years, there was an acute need to build research capacity to address these priorities, and IMHA invested 25% of its budget to support 12 of CIHR's strategic training initiatives in health research. Two of these training initiatives are directly in oral health research, and CIHR supports another initiative that includes about 35% of its mentors and trainees involved in oral health research. Through partnerships with foundations, corporations, and the Canadian Arthritis Network Centre of Excellence, IMHA strengthened already established research communities, especially in the areas of osteoarthritis, pain and inflammatory arthritis, by co-funding emerging teams and other multidisciplinary research networks.

Bringing Together Like-Minded Stakeholders

Communication among stakeholder groups is essential to determine strategic research directions. IMHA has supported a great number of workshops and some large consensus conferences to help set its research direction. The Canadian Association for

Dental Research (CADR) and IMHA co-hosted a national workshop that brought together key investigators from Canadian dental faculties and leaders of CDA. There have also been several other IMHA-supported workshops on topics such as research in dental hygiene and oral research priorities in aging. IMHA is a leader among the CIHR in-



Dr. Richard P. Ellen, chair, Institutional Advisory Committee, Institute of Musculoskeletal Health and Arthritis

"There is an acute need for more research capacity and more funded projects in clinical research and population research, as well as a greater investment in health services research.

There is especially the need for more clinician/scientists who concentrate on clinical issues with applications that would resonate with patients and address new diagnostic and treatment directions for dental practice."



Members of the IMHA Institute Advisory Board (IAB).

Front row, from left: Maryam Tabrizian, Lois Cohen, Jane Aubin (scientific director), Ilona Skerjanc, Juliette Cooper (former chair), Richard Ellen (IAB chair), Lucie Germain, Marc McKee.

Middle row, from left: Aileen Davis, Erna Snelgrove-Clarke, Phillip Gardiner, Denis Morrice, Hani El-Gabalawy, Michelle Albagli.

Back row, from left: Jan Dutz, Chris McGibbon, Klaus Wrogemann, Richard Singleton (IAB co-chair), Earl Bogoch.

Missing from photo: Alan Stordy

stitutes in knowledge translation, and its Knowledge Exchange Task Force (KETF) includes representatives of the public and stakeholders who can foster an excellent knowledge transfer environment. The oral health participants, including Dr. John O'Keefe, from CDA, are very prominent members of the KETF. IMHA also stresses that its promotion of research priorities must be based on a strong foundation of research ethics, which is analogous to how health practitioners accomplish their objectives.

Setting a New Strategic Course

CIHR is now past its rapid growth years as a new federal agency, and the organization has been undergoing a controlled influx of new leaders. The new scientific director of IMHA, Dr. Jane Aubin, was appointed in 2007, and almost all of the original IAB members, including the inaugural chair Dr. Juliette Cooper, have completed their term. IMHA has taken stock of its accomplishments and achievements over its first 6 years by conducting an analysis of strengths, weaknesses, opportunities and threats (SWOT) for each of its 6 foci, 3 strategic priorities, knowledge transfer and ethics. The oral health analysis was conducted with input from the dental faculties and CADR.

IMHA is presently identifying short- and longterm achievement targets and setting a course for a new strategic plan that will address the needs and priorities of the next 5 years. The IMHA IAB expects to concentrate more on the strategic needs of its smaller foci: oral health, skin and musculoskeletal rehabilitation. Unfortunately, the IAB is facing a difficult fiscal climate; therefore, we will likely see fewer, but better funded, programs that will undergo intensive strategic scrutiny to produce excellence in the most needed areas. A complementary strategic path will be to optimize collaboration with funding partners who are compatible with the CIHR institutes' strategic objectives: the Dentistry Canada Fund is one such potential partner in oral health research.

Though it is too early in IMHA's strategic planning process to publicize its key elements, there are several common issues that arose from the SWOT analysis of all the research foci. As for oral health research, our research community is considered strong internationally, but only in a handful of research areas, including prominence in mineralized/connective tissue research and neurosciences/pain, with pockets of excellence in biomaterials/bioengineering, infectious diseases and health services research. There is an acute need for more research capacity and more funded projects in clinical research and population research, as well as a greater investment in health services research. There is especially the need for more clinician/scientists who concentrate on clinical issues with applications that would resonate with patients and address new diagnostic and treatment directions for dental practice.

For example, in the past year, IMHA has posted a strategic request for applications for team-building grants in the area of health disparities among vulnerable populations. This is in direct response to the need for clinical and health services research that would reduce the burden of oral disease. There are also examples of recent requests for applications in which IMHA has partnered with other CIHR institutes, such as the Institute of Aboriginal Peoples' Health, to seek collaborative population and health services studies. Therefore, it is likely that IMHA's strategic plan going forward will continue to address research capacity in human investigation and target some strategic attention to the career development of clinician/scientists.

Funding Is Key

In the past 2 years, both new and established investigators have faced a real challenge when

competing for investigator-driven operating grants in CIHR's "open competition." The oral health community has seen a sharp decline in the number of operating grants funded during competitions when the success rate was low (e.g., in 2006). One of IMHA's strategic initiatives has been to fund short-term "priority announcement grants," which are essentially operating grants that allow highly ranked but unfunded projects to move forward while the investigator competes again for longer-term operating funds. This strategy has been successful thus far and well received among IMHA investigators. It is but one example of a key strategic priority to help IMHAaffiliated investigators prepare more thoroughly for open and team grant competitions.

Another strategy would be to better inform and prepare IMHA-affiliated investigators for funding opportunities announced by CIHR's other institutes, which usually come up in December and June each year. Considering the broad reach of oral health, it is clear that our community of investigators can make a strong case for fitting into the strategic priorities of most of the 13 CIHR institutes.

Since the role of the 13 CIHR institutes is to engage in strategic priorities that accelerate the

application of research to improve the health of Canadians, it is likely that IMHA's strategic plan will include a high accountability factor. I believe that oral health is well positioned strategically as a primary concern to the public. Oral health services are directly related to the ability of Canadians to put, quite literally, their hard-earned money where their mouth is, and the linkage between oral and general health has received much publicity. Since IMHA's institutional strategic budget is limited, it is likely that its strategic plan will endeavour to promote interdisciplinary approaches to solving its 3 main research priorities, especially the expansion of clinical research capacity. Our oral health research community should seek every opportunity to join with colleagues in IMHA's 5 other foci to develop innovative collaborative research strategies that will engage and retain a greater number of active research investigators in our field.

THE AUTHOR

Dr. Richard P. Ellen is the chair, Institutional Advisory Committee, Institute of Musculoskeletal Health and Arthritis. He is also a member of the CIHR Group in Matrix Dynamics, Dental Research Institute, faculty of dentistry, University of Toronto, Toronto, Ontario. Email: richard.ellen@dentistry.utoronto.ca