

CIHR's commitment to basic science questioned

In a move that is rattling some Canadian medical scientists, the Canadian Institutes of Health Research [CIHR] has endorsed an expansive set of programs aimed at harnessing its billion dollar annual budget not only for supporting fundamental science, but also for “delivering better health care” by moving “health knowledge along the innovation pipeline and into health and economic benefits.”

The aim of the new *Health Research Roadmap II: Capturing Innovation to Produce Better Health and Health Care for Canadians*, says Jane Aubin, CIHR's chief scientific officer, is to “encourage innovation, facilitate commercialization” and “champion the economic and social value of effective health care systems.” The roadmap document states that CIHR will also support “a broader disciplinary mix of researchers” and forge stronger links with health professionals, patient groups, charities and industry.

Some scientists who rely on CIHR to support fundamental research have reacted with dismay. They worry the agency, seeking to prove its economic worth to the government, has strayed from its mandate to incubate new medical knowledge of a sort that industry and health care systems almost always benefit from, but seldom invest in.

Dr. Joaquin (Quim) Madrenas, chairman of the Department of Microbiology and Immunology at McGill University, and executive director for the CIHR Human Immunology Network, is concerned that CIHR now devotes as little as 50% of its budget to basic science. “There is a misalignment between CIHR leadership and the research community.”

Debby Burshtyn, a lead researcher in immunology at the Li Ka Shing Institute of Virology at the University of Alberta warns that by constricting basic research, CIHR risks leaving “about 60% of the current basic researchers out in the cold.”

The new roadmap not only “violates [CIHR's] mandate but will be a catastrophe for scientific excellence in Canada,” says Dr. Michael Rudnicki, Canada Research Chair in Molecular Genetics at the Ottawa Hospital Research Institute.



defun/istock/Thinkstock

CIHR plans to “encourage innovation, facilitate commercialization.”

“I am absolutely appalled by the new CIHR strategic plan. CIHR has turned its back on discovery science.”

Federal funding “should be for basic or clinical discoveries using genuine peer review,” adds John Bergeron, co-founder of the McGill University and Génome Québec Innovation Centre. The shift in priorities away from discovery research, he argues, is a mistake that will profoundly damage Canadian science.

“Application and commercialization is done by the professionals in these areas,” Bergeron warns. “That is what biotech and big pharma do.”

Christine Williams, vice president, Research and Policy at the Canadian Cancer Society, says CIHR “is under a great deal of pressure to justify the value of its research and spread its investments thinly and broadly, and that may come at the expense of early pipeline research in the short term.”

Williams says applications to the Cancer Society's innovation grants program has doubled in the last two years, “mostly as a result of fewer ‘open’ idea funding opportunities at CIHR.”

However, CIHR's Aubin rejects the suggestion that the agency's support for basic science is waning. There is widespread misunderstanding about CIHR's support for basic science, she says, noting that funding for basic research is embedded within all CIHR's funding

streams. “They very much span all kinds of work including basic science.”

Aubin also denies that CIHR is prioritizing its commercialization drive, while noting “we're in the process of thinking through CIHR's role in the commercialization continuum.”

Meanwhile, funding for the agency has declined, notes Jim Woodgett, investigator and director of research at Toronto's Lunenfeld-Tanenbaum Research Institute. The concerns about CIHR's “mission creep” into health care system innovation and commercialization come at a time when its financial ability to extend its mandate beyond basic science is extremely limited, he says.

“In real dollar terms, the CIHR's budget has been cut at least 25% since the federal government flat-lined it in 2009.” As dollars for fundamental medical science dwindle, Woodgett says, CIHR should be especially wary of extending its scope into fields that industry and health providers can fund. “Canada badly lags in supporting investigative science that generates new knowledge. CIHR should make this its priority.”

CIHR's [previous roadmap](#), released in 2009, decried a “significant gap” in federal investment. The new roadmap, released Mar. 10, is silent on the topic. — Paul Christopher Webster, Toronto, Ont.

CMAJ 2015, DOI:10.1503/cmaj.109-5029