



\$254M invested in cancer research in 2005, reveals first pan-Canadian survey

Wednesday September 12, 2007 (TORONTO) - A report released today by the Canadian Cancer Research Alliance (CCRA) reveals that \$254 million dollars was invested in direct support of peer-reviewed cancer research in 2005 by 19 of the major cancer research funding organizations in Canada.

“This inaugural study from members and affiliated organizations of CCRA represents an important initial step in quantifying and qualifying the cancer research funding landscape in Canada,” says Dr. Philip Branton, Scientific Director of the Institute of Cancer Research of the Canadian Institutes of Health Research and Chair of the CCRA Board of Directors. “It is the first study of its kind in Canada to gather detailed information on cancer research being supported by a pan-Canadian group of organizations, and to assess this investment in terms of the type of research being done and the type of cancer being investigated.”

Formalized in December 2003, CCRA is an alliance of cancer research funding organizations and affiliated partners working together to enhance the overall state of cancer research funding in Canada through improved communication, cooperation and coordination. Members include federal and provincial government organizations, non-government organizations and other key stakeholders within the cancer research arena. The Alliance also advises the Canadian Partnership Against Cancer on its research agenda.

Research investment by the Canadian Institutes of Health Research, Canada’s lead federal funding agency for health research, accounted for 45% of the cancer research investment in 2005. The National Cancer Institute of Canada, the country’s largest cancer-focused research funding charity supported by the Canadian Cancer Society and The Terry Fox Foundation, was the single largest cancer research funder in the voluntary sector at 24%.

“The information collected in this survey is vitally important to all the members of CCRA, and will help us in our individual organizational and collective strategic planning,” states Dr. Elizabeth Eisenhauser, President of the National Cancer Institute of Canada. “As organizations involved in funding cancer research, we want to ensure that we identify opportunities and ways where we can pool our expertise and resources in order to maximize return on our research investment.”

Chair of the Canadian Partnership Against Cancer, Jeff Lozon commended this first research report. “Research is a critical pillar in our strategy to control cancer. Coordinating and leveraging cancer research expertise across the country and speeding the uptake of cancer research findings into clinical practice will help us achieve our objectives to reduce the incidence of cancer, reduce the likelihood of dying of cancer and improve the quality of life for those living with cancer in Canada.”

Survey Findings

In terms of the type of research being supported, the CCRA survey found that:

- 45% of the investment made in 2005 was in the area of biology, that is, research which looked at the biology of how cancer starts and progresses as well as normal biology relevant to these processes.
- One in five of the cancer research dollars was invested in treatment research, with over half of this investment supporting studies focused on the discovery and development of systemic treatments like drugs and other treatments.

- Between 7 to 10% of the total investment was in the area of prevention, which includes prevention interventions and exogenous factors (lifestyle, environmental and infectious agents) involved in the origins and causes of cancer.

“There are several important initiatives underway which will likely change this dollar distribution in the next few years,” explains Dr. Branton. These include:

- a Cancer Research Prevention Initiative launched by the National Cancer Institute of Canada and the Canadian Cancer Society
- an Environment-Cancer Fund created by The Cancer Research Society
- the creation of a soon-to-be-announced initiative by The Terry Fox Foundation, linking major research centres across Canada
- a joint Regional/National Clinical Research Initiatives program launched by the Canadian Institutes of Health Research and the Canadian Foundation of Innovation
- substantial provincial cancer research investment in Alberta (Alberta Cancer Board and Alberta Heritage Foundation for Medical Research) and in Ontario (Ontario Institute of Cancer Research)
- an innovative translational research funding program and pan-Canadian cohort study platform being supported by the Canadian Partnership Against Cancer, the new independent body established by the federal government made up of patient survivors, cancer experts and government representatives from across the country to spur implementation of a Canadian strategy to control cancer.

In terms of types of cancer, 44% of the investment was for research not directed towards a particular type of cancer, but relevant to common aspects of many cancers. Half of this non-specific research investment was in the area of biology. Another 22% was directed toward treatment research, and 13% was for research in the areas of cancer control, outcomes and survivorship.

The highest level of research investment for a given cancer type in 2005 was for breast cancer at \$38M. This reflects several breast cancer specific granting opportunities in Canada through groups such as the Canadian Breast Cancer Research Alliance, Canadian Breast Cancer Foundation, and other provincial initiatives in Quebec and Alberta.

The next largest cancer-specific investment (\$18M) was directed towards the study of leukemias. Over half of this investment was in the biology area. 2005 research investment in lung cancer, the cancer site with the most new cases and the most deaths in Canada each year, was \$7M, representing less than 3% of the total research investment of \$254M.

Although a number of smaller provincial health research organizations did not participate in the survey, the results revealed that Canada’s most populous provinces received the greatest share of the cancer research dollars in 2005.

“The survey has helped to elucidate what we anecdotally suspected, namely, that studies of some types of cancers likely require more funding, that more investment in studies designed to understand the causes of cancer and how to prevent cancer are needed, and that the conduct of cancer research is fairly concentrated in key centres in the country,” says Dr. Branton. “Our next step is to incorporate these findings into our planning process so that we can work together to facilitate substantive research opportunities and scientific discoveries that will make a difference to the many Canadians affected by cancer.”

The Alliance is currently undertaking the second phase of this survey – collecting data on research funded in 2006 and aiming to expand the number of participating organizations.

Canadian Cancer Research Survey

The Canadian Cancer Research Survey is the first collaboratively funded project undertaken by CCRA members. Information was gathered on all research projects actively funded in calendar year 2005 (3,260 projects in total catalogued) by 19 cancer research funding organizations. All projects within the CCRA database were classified according to type of research and type of cancer. The Common Scientific Outline (CSO), a classification system specific to cancer research, was used as the tool to classify research type. The International Statistical Classification of Diseases

and Related Health Problems, 10th Revision, Version for 2006 (ICD-10) was used to classify type of cancer. For the full report, “Cancer Research Investment in Canada”, please go to the CCRA web site: <http://www.ccra-acrc.ca>.

The term “cancer research investment” is used within the CCRA report to represent the direct funding of cancer research projects that are peer-reviewed, and administered by the organizations participating in the survey. Unless otherwise noted, research projects are included under the organization which administers the grants and awards programs even in those situations where the project may be funded by more than one organization. The investment shown for individual organizations may not reflect additional expenditures on researcher salaries, infrastructure, indirect costs, and other vital components that support the conduct of research.

Canadian Cancer Research Alliance (CCRA) Members & Affiliated Partners

Members include federal government organizations: Canadian Institutes of Health Research, National Research Council of Canada, Public Health Agency of Canada; provincial government organizations: Alberta Cancer Board, Alberta Heritage Foundation for Medical Research, BC Cancer Agency, CancerCare Manitoba, Cancer Care Nova Scotia, Cancer Care Ontario, Fonds de la recherche en santé du Québec, Michael Smith Foundation for Health Research, New Brunswick Cancer Network, Ontario Institute for Cancer Research, Saskatchewan Cancer Agency; and voluntary sector/non-governmental organizations: Canadian Association of Provincial Cancer Agencies, Canadian Breast Cancer Foundation, Canadian Breast Cancer Research Alliance, Canadian Cancer Society, Canadian Partnership Against Cancer, National Cancer Institute of Canada, Prostate Cancer Research Foundation of Canada, The Cancer Research Society and The Terry Fox Foundation. Affiliated partners include: Canadian Prostate Cancer Research Initiative, Canadian Tobacco Control Research Initiative, and Fondation du cancer du sein du Québec.

Figure and Tables

Table 1. 2005 cancer research investment of CCRA member and affiliated organizations

Figure 1. Distribution of 2005 cancer research investment of CCRA member and affiliated organizations by type of research

Table 2. Selected statistics for cancers with both high numbers of new cases and deaths in 2003 and 2005 investment of CCRA member and affiliated organizations

- 30 -

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TABLE 1.
2005 cancer research investment of CCRA member and affiliated organizations

Organization Type	CCRA Member & Affiliated Organization	2005 Investment with Initiatives included [1]
Federal government	Canadian Institutes of Health Research	\$113,288,298
	National Research Council	\$2,342,650
Provincial cancer agency	Alberta Cancer Board	\$6,333,854
	BC Cancer Agency	\$6,281,125
	CancerCare Manitoba	\$953,853
	Cancer Care Nova Scotia [2]	\$100,000
	Cancer Care Ontario	\$7,798,133
	Saskatchewan Cancer Agency	\$290,488
Provincial health research organization	Alberta Heritage Foundation for Medical Research	\$5,483,672
	Fonds de la recherche en santé du Québec	\$10,066,617
	Michael Smith Foundation for Health Research	\$5,783,604
	Ontario Institute for Cancer Research	\$15,361,703
Voluntary sector	Canadian Breast Cancer Foundation	\$7,226,390
	Fondation du cancer du sein du Québec	\$1,066,667
	National Cancer Institute of Canada [3]	\$61,546,820
	The Cancer Research Society	\$5,519,556
Multi-sectoral partnership	Canadian Breast Cancer Research Alliance [4]	\$4,124,701
TOTAL		\$253,568,130

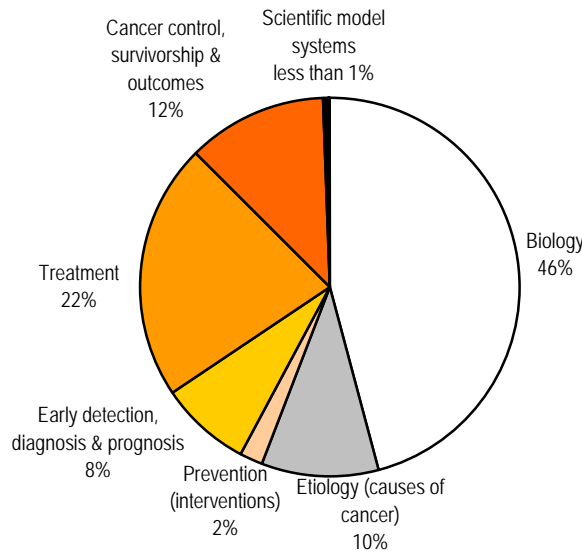
[1] Shows investment in the Canadian Breast Cancer Research Alliance, Canadian Prostate Cancer Research Alliance, and Canadian Tobacco Control Research Initiative under the organizations funding those initiatives.

[2] Figure shown for Cancer Care Nova Scotia does not include 12 studentships estimated at \$60,000 in 2005.

[3] National Cancer Institute of Canada is funded by the Canadian Cancer Society and The Terry Fox Foundation.

[4] Includes support provided by Avon Canada (\$0.95M), Breast Cancer Society of Canada (\$0.11M), CURE Foundation (\$0.23M) and the Public Health Agency of Canada (\$2.84M). Support provided by Canadian Breast Cancer Foundation, Canadian Institutes of Health Research, National Cancer Institute of Canada, and The Cancer Research Society are included in the figures shown for these organizations. Total research investment for the Canadian Breast Cancer Research Alliance in 2005 was \$10.2M.

FIGURE 1.
Distribution of 2005 cancer research investment of CCRA member and affiliated organizations by type of research [1]



[1] The seven broad categories of scientific interest within the Common Scientific Outline.

TABLE 2.
Selected statistics* for cancers with both high numbers of new cases and deaths in 2003 and 2005 investment of CCRA member and affiliated organizations

CANCER TYPE	2005 Investment	% Total 2005 Investment	New Cases [1]	% Total New Cases	Deaths [2]	% Total Deaths	Potential Years of Life Lost [3]	% Total Potential Years of Life Lost
Bladder	\$737,413	0.3	6,301	4.4	1,586	2.4	18,000	1.8
Breast	\$38,346,404	15.1	18,996	13.2	5,097	7.7	95,300	9.5
Colorectal	\$9,646,302	3.8	18,880	13.2	8,124	12.3	111,300	11.1
Leukemia	\$18,158,547	7.2	4,049	2.8	2,303	3.5	37,000	3.7
Lung	\$7,067,193	2.8	20,560	14.3	17,374	26.4	266,800	26.5
Non-Hodgkin's lymphoma	\$6,467,633	2.6	5,823	4.1	2,550	3.9	40,600	4.0
Pancreas	\$1,321,555	0.5	3,449	2.4	3,441	5.2	50,300	5.0
Prostate	\$12,012,692	4.7	19,472	13.6	3,658	5.6	33,400	3.3

*From: Canadian Cancer Society/National Cancer Institute of Canada. *Canadian Cancer Statistics 2007*. Toronto, Canada. 2007.

[1] Number of people diagnosed for the first time with cancer in 2003.

[2] Number of people who died from cancer in 2003.

[3] Number of years of life lost for people who died prematurely of cancer in 2003 [difference from expected average life expectancy].