

Decade in Review

CANADA'S TOP 50 RESEARCH UNIVERSITIES

THEN AND NOW

In 1997, the situation facing Canada's research universities was grim. Direct and indirect support for university research was declining. The three national Granting Councils were scheduled to see their funding diminish by over 25% between 1994 and 1998 – a total of \$200 million. Federal cut-backs coincided with lower provincial contributions to research overheads and physical plants. The overall trend was a downward spiral. The nation would be drawing down its stock of intellectual capital at precisely the time it needed to be building it up.

The leaders of Canada's research universities approached the federal government with a plea to rejuvenate the research funding scene. The eventual result was the establishment of the Canada Foundation for Innovation, Canada Research Chairs program and Canadian Institutes of Health Research and

more money for the three main Granting Agencies. Subsequent governments, to their credit, have maintained support.

Flash forward to today. The Top 50 research universities reported in Fiscal 2009 \$6.24 billion in research income, compared with only \$2.2 billion in Fiscal 1999 – an increase of 180.1%. A key indicator – research intensity (research income per full-time faculty position) – also rose substantially, from research income per full-time faculty position of \$73,000 in Fiscal 1999 to \$167,200 in Fiscal 2009.

Much of the improvement was due to the expansion of federal and provincial government support for research. Governments' share of research funding increased to 68% of the total in Fiscal 2009 from 61% in Fiscal 1999. As a result of the sharp rise in government support, the share of Corporate financing declined to 13% of the total in Fiscal 2009, from 17% in Fiscal 1999, even

though actual Corporate research funding did increase.

The tech bust of 2001 did not help universities. It undoubtedly put a damper on Corporate research support, but it also strongly affected Non-Corporate giving. So, the decade was not entirely a smooth ride.

A RISING TIDE OF FUNDING

The rising tide of Top 50 university research funding has raised all participants. Not only did the larger Medical/Doctoral institutions flourish – their research income expanded by 180.2% between Fiscal 1999 and Fiscal 2009 – so too did the Comprehensive universities and the smaller Undergraduate institutions. Comprehensive university research income expanded by 157.9% and research income at Undergraduate universities exploded by 268.1%.

Over the decade, the performance of the Medical/Doctoral universities was bolstered by the success of their affiliated research hospitals and health authorities. Comprehensive universities became serious players on the research scene. Undergraduate institutions, starting from a much lower base of activity, embraced the new research opportunities and increased their share of total research funding to 5% in Fiscal 2009 from 4% in Fiscal 1999. An excellent example is the University of Prince Edward Island, where research income increased from \$3 million in Fiscal 1999 to nearly \$16 million in Fiscal 2009 – a gain of 432.0%.

University rankings change from year-to-year. Comparing the 5 top universities in Fiscal 2009 with the situation in Fiscal 1999, shows how far research income has progressed at all three university types.

THE \$100 MILLION CLUB

In Fiscal 1999, only 6 universities reported research income of \$100 million or more. Their combined income was \$1.13 billion. Today, that number has expanded to 17 institutions with combined income of \$5.27 billion. This group of research universities saw their combined income grow by 365.6% over the 11-year period, compared with the 180.1% average for all Top 50 institutions.

PROVINCIAL RESULTS

Institutions in a number of provinces have done especially well over the past decade. Top 50 universities based in British Columbia grew their research income by 286.3% and captured 12% of total university research income in Fiscal 2009, compared with only 8% in Fiscal 1998.

The \$100 Million Club

2009 Rank	University	Research Income \$000	1999 Rank	University	Research Income \$000
1	University of Toronto*	\$858,182	1	University of Toronto*	\$306,519
2	University of British Columbia*	\$524,569	2	Université de Montréal*	\$206,224
3	University of Alberta*	\$507,613	3	McGill University*	\$198,899
4	Université de Montréal*	\$486,179	4	University of Alberta*	\$174,296
5	McGill University*	\$432,118	5	University of British Columbia*	\$139,102
6	McMaster University*	\$377,732	6	University of Calgary*	\$107,843
7	Université Laval*	\$282,657			
8	University of Calgary*	\$264,358			
9	University of Western Ontario*	\$241,700			
10	University of Ottawa*	\$236,977			
11	Queen's University*	\$178,180			
12	University of Manitoba*	\$172,067			
13	University of Saskatchewan*	\$169,450			
14	University of Waterloo	\$157,152			
15	University of Guelph	\$154,850			
16	Dalhousie University*	\$125,689			
17	University of Victoria	\$104,812			
Total		\$5,274,285	Total		\$1,132,883

*Has a medical school

Top 10 Research Intensive Universities**

2009 Research Intensity Rank	University	Research Intensity (\$ per full-time faculty) \$000	1999 Research Intensity Rank	University	Research Intensity (\$ per full-time faculty) \$000
1	University of Toronto*	\$351.0	1	McGill University*	\$163.7
2	McMaster University*	\$309.4	2	University of Guelph	\$140.5
3	University of Alberta*	\$308.8	3	University of Alberta*	\$131.4
4	McGill University*	\$269.2	4	Université de Montréal*	\$126.6
5	Université de Montréal*	\$257.2	5	University of Toronto*	\$123.8
6	University of British Columbia*	\$236.9	6	McMaster University*	\$99.8
7	Queen's University*	\$218.4	7	Queen's University*	\$94.4
8	Université Laval*	\$211.7	8	University of Ottawa*	\$94.3
9	University of Ottawa*	\$194.1	9	University of Calgary*	\$89.4
10	University of Guelph	\$192.6	10	University of British Columbia*	\$82.8

*Has a medical school **Includes full-service institutions only

Top 5 Medical/Doctoral Universities

2009 Tier Rank	University	Research Income \$000	1999 Tier Rank	University	Research Income \$000
1	University of Toronto	\$858,182	1	University of Toronto	\$306,519
2	University of British Columbia	\$524,569	2	Université de Montréal	\$206,224
3	University of Alberta	\$507,613	3	McGill University	\$198,899
4	Université de Montréal	\$486,179	4	University of Alberta	\$174,296
5	McGill University	\$432,118	5	University of British Columbia	\$139,102
Total		\$2,808,661	Total		\$1,025,040

Top 5 Comprehensive Universities

2009 Tier Rank	University	Research Income \$000	1999 Tier Rank	University	Research Income \$000
1	University of Waterloo	\$157,152	1	University of Guelph	\$88,535
2	University of Guelph	\$154,850	2	University of Waterloo	\$57,351
3	University of Victoria	\$104,812	3	Université du Québec à Montréal	\$30,129
4	Simon Fraser University	\$83,838	4	Institut national de la recherche scientifique*	\$26,025
5	Carleton University	\$72,750	5	Carleton University	\$24,733
Total		\$573,402	Total		\$226,773

*Not a full-service university

Top 5 Undergraduate Universities

2009 Tier Rank	University	Research Income \$000	1999 Tier Rank	University	Research Income \$000
1	Laurentian University*	\$21,963	1	Université du Québec à Trois-Rivières	\$10,007
2	Ryerson University	\$21,839	2	Laurentian University	\$8,172
3	Université du Québec à Chicoutimi	\$19,560	3	Université du Québec en Abitibi-Témiscamingue	\$5,475
4	Royal Military College of Canada	\$18,301	4	Ryerson Polytechnic University	\$5,182
5	Lakehead University*	\$18,047	5	University of Northern British Columbia	\$5,008
Total		\$99,710	Total		\$33,844

*Has a medical school

The two universities in Saskatchewan boosted that province's total research income by 229.0% between Fiscal 1999 and Fiscal 2009. Ontario's Top 50 universities (19 in Fiscal 2009, 16 in Fiscal 1999) increased their research income by 187.0%. In Alberta, three universities expanded their combined research income by 176.0%, and 12 universities in Quebec (14 in Fiscal 1999) managed a 141.0% gain in total research income during the period. However, whereas Quebec universities captured 29% of total Top 50 universities research income in Fiscal 1999; they only garnered 25% of the total in Fiscal 2009.

RESEARCH INTENSITY ON THE RISE

In Fiscal 1999, Canada's leading university by research intensity (research income per full-

time faculty position) attracted \$163,700 of research income per faculty. In Fiscal 2009, faculty at 12 full-service universities have that much money at their disposal. Shown is a list of the top 10.

AND NOW?

Historians of science will look back on the past decade as the Golden Age of research funding in Canada. Of course, funding cannot continue to grow forever. Even before the current economic crisis funding increases had begun to level off. It would be unrealistic, for the foreseeable future, to expect research funding growth to exceed economic growth. Some belt-tightening might even be in order. Nevertheless, the alarm that university presidents sounded in 1997 seems a distant memory.