

Canada's Top 50 Research Universities List 2007 Analysis

Research Income Increases

Research income at Canada's Top 50 Research Universities got back on track in Fiscal 2006, increasing by 6.4%, compared with only 3.2% the year before. Total income grew to \$5.53 billion, up from \$5.2 billion in Fiscal 2005. Overall, 36 universities reported increases in research income and 14 reported declines. However, the overall amount of money being invested in university research grew more slowly than in the first half of the decade, when annual increases of between 12-24% were the norm. Research income growth was somewhat limited in Fiscal 2006 by modest growth both in Corporate (4.7%) and total Government (5.3%) funding. In contrast, Non-corporate funding increased sharply (12.3%) and returns from Endowments/investments grew even more (23.6%). However, despite their faster rate of growth the latter two categories accounted for only 15% of the total.

In Fiscal 2006, Federal government sources accounted for 49% of total funding, up from 47% in Fiscal 2005. However, Provincial funding contributed only 18% of the total, a drop from 21% in Fiscal 2005. The lower Provincial share of total was due to a -6.5% investment decline in Fiscal 2006. Research funding at Canadian universities paid for by Foreign governments expanded by 21.5%, but accounted for only 2% of total funding.

The \$100 Million Club Expands

Seventeen universities – up from 16 last year – can now boast annual research income of more than \$100 million. New to the list in Fiscal 2006 is University of Victoria. U. Vic is one of only 3 institutions that achieved this result without the benefit of a medical school - units that attract significant research investment. In total, research income at the 17 biggest research universities increased by 6.8% in Fiscal 2006, slightly more than the 6.4% all-university average. Income grew at 11 of the 17 leaders, but declined at 6 institutions.

The \$100 Million Club		
2006 Rank	University	Research Income \$000
1	University of Toronto*	\$763,541
2	Université de Montréal*	\$447,158
3	University of British Columbia*	\$421,993
4	McGill University*	\$397,136
5	University of Alberta*	\$382,810
6	McMaster University*	\$331,575
7	University of Calgary*	\$262,215
8	Université Laval*	\$258,948
9	University of Ottawa*	\$244,003
10	University of Western Ontario*	\$225,946
11	Queen's University*	\$173,696
12	University of Guelph	\$149,640
13	University of Manitoba*	\$139,646
14	University of Waterloo	\$127,472
15	Dalhousie University*	\$106,895
16	University of Saskatchewan*	\$106,887
17	University of Victoria	\$100,030

*Has a medical school

Uneven Provincial Performance

There was considerable variation in the results by province, with some jurisdictions performing much better than the national average, and some not as well. Seven universities located in the Prairie Provinces performed noticeably less well than their counterparts in other parts of the country. Manitoba (-4.6%), Saskatchewan (-4.2%) and Alberta (-3.3%), all saw declines in their research income between Fiscal 2005 and 2006. In comparison, on both the East and West Coasts, universities managed double-digit income growth: East Coast - New Brunswick (12.5%), PEI (30.1%) and Newfoundland (25.6%) and West Coast (21.7%). The 17 universities in Ontario also increased their income (8.9%), out-pacing the national average (6.4%). For a second year running Quebec universities lagged the national growth rate, increasing their research income by only 2.9%.

Top 50 –Leading Provinces	
Province	% of Total
Ontario (17)	42
Quebec (12)	25
Alberta (3)	12
British Columbia (4)	11

Gainers and Losers

A number of standout universities increased their research income substantially above the national rate in Fiscal 2006. Many of them are smaller institutions. Leading the pack was Laurentian University, where research income jumped by an impressive 133.0%. École de technologie supérieure (106.1%), University of Northern British Columbia (90.2%) and Trent University (80.8%) all made notable gains, as did 6 other institutions.

Top 10 Universities by Growth			
2006 Rank		University	% Change 2005-2006
Income Growth	Overall		
1	26	Laurentian University*	133.0
2	29	École de technologie supérieure+	106.1
3	34	University of Northern British Columbia	90.2
4	32	Trent University	80.8
5	47	Saint Mary's University	43.6
6	17	University of Victoria	40.2
7	38	University of Prince Edward Island	30.1
8	10	University of Western Ontario*	25.6
9	19	Memorial University of Newfoundland*	25.6
10	46	Nova Scotia Agricultural College+	23.8

*Has a medical school

+Not a full-service university Apparent ties due to rounding

Other institutions did not fare as well, usually as a result of short-term conditions. Research income declined by up to -10.4% at one institution.

Bottom 10 Universities by Growth			
2006 Rank		University	% Change 2005-2006
Income Growth	Overall		
1	44	Wilfrid Laurier University	-10.4
2	33	Lakehead University*	-9.2
3	30	University of Regina	-8.4
4	40	Université du Québec à Trois-Rivières	-6.8
5	4	McGill University*	-6.1
6	37	Université du Québec à Chicoutimi	-5.7
7	13	University of Manitoba*	-4.8
8	6	McMaster University*	-3.9
9	5	University of Alberta*	-3.5
10	7	University of Calgary*	-3.4

*Has a medical school

Intensity Growth Back on Pace

After increasing by only 0.1% in Fiscal 2005, research intensity – research income per full-time faculty position – rebounded in Fiscal 2006, growing by 3.9% overall. However, this was the second-weakest result in the decade. Growth in total research income of 6.4%, combined with faculty expansion of 2.4%, yielded the modest increase in intensity. On average, each Canadian university attracted \$155,600 of research income per faculty in Fiscal 2006, up from \$149,800 in Fiscal 2005.

Three leading universities vied for the research intensity crown. University of Toronto led the pack, bringing in \$323,400 per full-time faculty position. Closely on its heels were McMaster University (\$290,900) and McGill University (\$259,100). In total, 13 full-service institutions bettered the national per-faculty income average \$155,600.

Top 10 Research Intensive Universities**			
2006 Rank		University	Research Intensity (\$ per full-time faculty) \$000
Research Intensity	Overall		
1	1	University of Toronto*	\$323.4
2	6	McMaster University*	\$290.9
3	4	McGill University*	\$259.1
4	5	University of Alberta*	\$252.2
5	9	University of Ottawa*	\$239.2
6	2	Université de Montréal*	\$237.0
7	11	Queen's University*	\$219.3
8	3	University of British Columbia*	\$198.4
9	8	Université Laval*	\$191.4
10	12	University of Guelph	\$191.1

*Has a medical school

**Includes full-service institutions only

Larger Role for Non-Medical Universities

Universities with medical schools traditionally top the research income tables because they are able to attract investment from a wider range of funders. However, 34 universities without medical schools increased their share of total research spending to 20% of the total, up from 18% the year before. Non-medical institutions' income rose by 16.3%, compared with only 4.2% at the universities with medical schools. The sixteen universities with medical schools still dominate the funding scene, however, accounting for 80% of the total.

Research Universities of the Year

Each year RESEARCH Infosource shines the spotlight on 3 *Research Universities of the Year* (see our website www.researchinfosource.com for additional information). These leading institutions stand out on a balanced scorecard of research input and output/impact indicators.

This year, kudos go to: University of Toronto in the Medical/Doctoral category, University of Guelph in the Comprehensive category and Royal Military College in the Undergraduate category.

This Year and Next

Research income growth at Canada's universities returned to a more normal path in Fiscal 2006 (6.4%), following a hold-the-line increase in Fiscal 2005 (3.2%). Some will view this as a glass half-empty, when compared with the double-digit increases at the beginning of the decade. Others will welcome the predictability of steady if unspectacular growth.

Because federal and provincial governments are the largest single funders of university research, their investments tend to define the performance of the system. But less well known is the important but expanding role of Non-corporate sources. This category includes non-government grants/contracts and donations/bequests from individuals, along with funding by not-for-profit organizations and foundations. These have been expanding quickly in recent years, indicating a growing generosity on the part of private funders.

Between 1999 and today, total funding of university research in Canada expanded by close to 150%, a rate that is clearly not sustainable in the long term. We can forecast that new investment will be needed to replace and renew some of the capital stock that resulted from earlier rounds of investment. Other funds will be needed to finance a growing number of researchers. As the largest funders, governments will need to stay the course.