

Canada's Top 50 Research Universities List 2015 Analysis

Research Income Reverses Course

For the first time in 14 years the combined research income of Canada's Top 50 Research Universities declined by -1.6% in Fiscal 2014. This follows several years of weak growth in the 1% range. Total research income slipped to \$6.67 billion in Fiscal 2014 from \$6.78 billion in Fiscal 2013. Research intensity – research income per faculty position – declined by -1.4%, moderated by a -0.2% drop in faculty numbers. Average research intensity fell to \$173,500 from \$175,900 the year before.

The drop in Top 50 research funding resulted from a cascade of funding declines, including a fall of -1.0% in funds available from the four major national granting agencies. Resources from the Natural Sciences and Engineering Research Council fell by -2.8%, and money received from the Canada Foundation for Innovation fell by -3.2%. However, grants from the Canadian Institutes of Health Research rose by 1.3%, as did funding from the Social Sciences and Humanities Research Council, which rose by 0.9%. Total Federal Government funding declined by -2.6%, whereas Provincial Government funding fell by -6.7%. In addition, universities reported a striking -20.0% fall in funding by Individuals and a -2.3% fall in Corporate funding. On a more positive note, Non-Profit funding (9.2%) and Foreign Government funding (7.5%) both had solid increases.

The \$100 Million Club

The disappointing overall Top 50 results were mirrored in the composition of RESEARCH Infosource's \$100 Million Club – an elite group of universities that attracted \$100 million or more of research funding in Fiscal 2014. The Club's membership declined to 18 from 20 last year as Memorial University of Newfoundland and University of Victoria fell off the list.

The \$100 Million Club		
FY2014 Rank	University	Research Income \$000
1	University of Toronto*	\$1,041,374
2	Université de Montréal*	\$548,849
3	University of British Columbia*	\$547,027
4	McGill University*	\$477,843
5	University of Alberta*	\$462,891
6	Université Laval*	\$324,803
7	University of Calgary*	\$324,212
8	McMaster University*	\$310,608
9	University of Ottawa*	\$275,266
10	Western University*	\$237,894
11	University of Saskatchewan*	\$195,264
12	University of Waterloo	\$177,425
13	University of Manitoba*	\$154,280
14	Queen's University*	\$148,486
15	University of Guelph	\$146,657
16	Dalhousie University*	\$128,084
17	Université de Sherbrooke*	\$121,938
18	Simon Fraser University	\$103,130

*Has a medical school

In Fiscal 2014, the \$100 Million Club universities reported research income of \$5.73 billion, a drop of -5.1% over last year. Research income fell at 9 of the 18 Club institutions. With 2 universities leaving the Club, its share of Top 50 research income dropped to 86% of the total in Fiscal 2014 from 89% in Fiscal 2013.

Provincial Performance

With 18 universities, Ontario led the way among provinces, accounting for 40% of total research income in Fiscal 2014, down from 41% last year. Quebec's 13 institutions increased their share of the total to 27% from 25% in Fiscal 2013. Alberta's 3 universities accounted for 12% of total research income, up from 11% the previous year. British Columbia's 4 universities accounted for 11% of the total compared to 12% the year before. Disappointingly, research income fell in all 4 Atlantic Provinces by a combined -18.4%, as it did in British Columbia (-5.8%) and Ontario (-5.0%). However, each of the 3 Prairie Provinces saw their research income increase – notably by 19.6% in Saskatchewan, 11.5% in Manitoba and 5.4% in Alberta. Research income also increased in Quebec (3.3%).

Top 50 –Leading Provinces	
Province	% of Total
Ontario (18)	40
Quebec (13)	27
Alberta (3)	12
British Columbia (4)	11

Research Income Growth

Overall in Fiscal 2014, 27 universities recorded gains in research income versus 23 where research income dropped. This compares with Fiscal 2013 when 29 universities posted research income growth versus 21 where research income dropped.

The top 10 universities for research income growth were led by Ryerson University, where research income expanded by 25.9%, closely followed by Université de Moncton (25.2%), University of Saskatchewan (23.6%), University of Northern British Columbia (21.9%) and Brock University (14.7%).

Top 10 Universities by Growth			
FY2014 Rank		University	% Change 2013-2014
Research Income Growth	Overall		
1	27	Ryerson University	25.9
2	44	Université de Moncton	25.2
3	11	University of Saskatchewan*	23.6
4	43	University of Northern British Columbia	21.9
5	37	Brock University	14.7
6	13	University of Manitoba*	12.4
7	30	École de technologie supérieure ⁺	11.4
8	23	Institut national de la recherche scientifique ⁺	11.0
9	5	University of Alberta*	10.8
10	21	York University	9.3

*Has a medical school
+Not a full-service university

Research Intensity

Overall research intensity – research income per faculty position – fell by -1.4% in Fiscal 2014, due to declines both in research income and in faculty numbers. On average, the Top 50 had research intensity of \$173,500, down from \$175,900 the year before. Institut national de la recherche scientifique (\$415,500 per faculty), University of Toronto (\$400,500) and McMaster University (\$339,500) led the ranking.

Top 10 Research Intensive Universities			
FY2014 Rank		University	Research Intensity (\$ per faculty) \$000
Research Intensity	Overall		
1	23	Institut national de la recherche scientifique ⁺	\$415.5
2	1	University of Toronto*	\$400.5
3	8	McMaster University*	\$339.5
4	2	Université de Montréal* ++	\$292.1
5	4	McGill University*	\$281.7
6	5	University of Alberta*	\$271.8
7	3	University of British Columbia*	\$228.4
8	9	University of Ottawa*	\$214.9
9	6	Université Laval*	\$213.8
10	7	University of Calgary*	\$212.6

*Has a medical school +Not a full-service university
++Based on 2011-2012 faculty counts; 2013-2014 were not available

Tier Groups

The combined research income at the 16 Medical/Doctoral universities fell by -1.7% to \$5.39 billion in Fiscal 2014, as did the research income at the 12 Comprehensive universities (-2.2%) to \$929.9 million. Research income at the 22 Undergraduate universities, on the other hand, posted an overall increase of 2.9% to \$355.1 million.

Research Universities of the Year

RESEARCH Infosource is pleased to highlight the achievements of 3 *Research Universities of the Year* – the leading institutions that excelled on a balanced scorecard of research input and output/impact indicators. This year's winners are: University of Toronto in the Medical/Doctoral category, University of Waterloo in the Comprehensive category and Lakehead University in the Undergraduate category.

Spotlight on University Corporate and Non-Profit Research Partnerships

RESEARCH Infosource shined the spotlight on university research partnerships as measured by grants or contracts received from corporate and non-profit sources during the period FY2010-FY2014 for the following metrics:

Total corporate research income: winners were McMaster University (\$588.7 million) in the Medical/Doctoral category, University of Guelph (\$98.6 million) in the Comprehensive and Université du Québec à Chicoutimi (\$38.3 million) in the Undergraduate category.

Total non-profit research income: winners were University of Toronto (\$1.24 billion) in the Medical/Doctoral category, University of Waterloo (\$98.8 million) in the Comprehensive category and Lakehead University (\$18.3 million) in the Undergraduate category.

Corporate research income as percent of total university research income: winners were McMaster University (35.1%) in the Medical/Doctoral category, University of Regina (12.9%) in the Comprehensive category and Université du Québec à Chicoutimi (31.7%) in the Undergraduate category.

Non-profit research income as percent of total university research income: winners were University of Toronto (24.8%) in the Medical/Doctoral category, Simon Fraser University (14.6%) in the Comprehensive category and Université de Moncton (21.3%) in the Undergraduate category.

This Year and Next

Last year we wrote that “*overall next year looks to be one of restrained funding growth*”. As indicated by this year’s disappointing findings we were somewhat optimistic. Most of the key indicators suffered declines. Because government sources account for the bulk of university research funding, as go their budgets so goes research funding in the higher education sector.

The raw research income data tend to mask a difficult underlying situation. Although general price inflation is currently low, research input costs typically rise somewhat faster than overall prices. This places additional pressure on available resources.

With Canada’s economic prospects currently looking uncertain it is difficult to see any strong recovery in universities’ research prospects next year.