

1. Comparisons and Rankings

In 2008, U of T Engineering ranked 10th in the world – up from 11th place in 2007 – 7th in North America, and first in Canada according to the Times Higher Education-QS (THE) World University Rankings for Engineering and Information Technology. Based on data from THE, U.S. News & World Report ranked U of T Engineering 10th in the world in their World's Best Colleges and Universities ranking in 2009. On both metrics, our closest Canadian competitor, McGill University, ranked 18th.

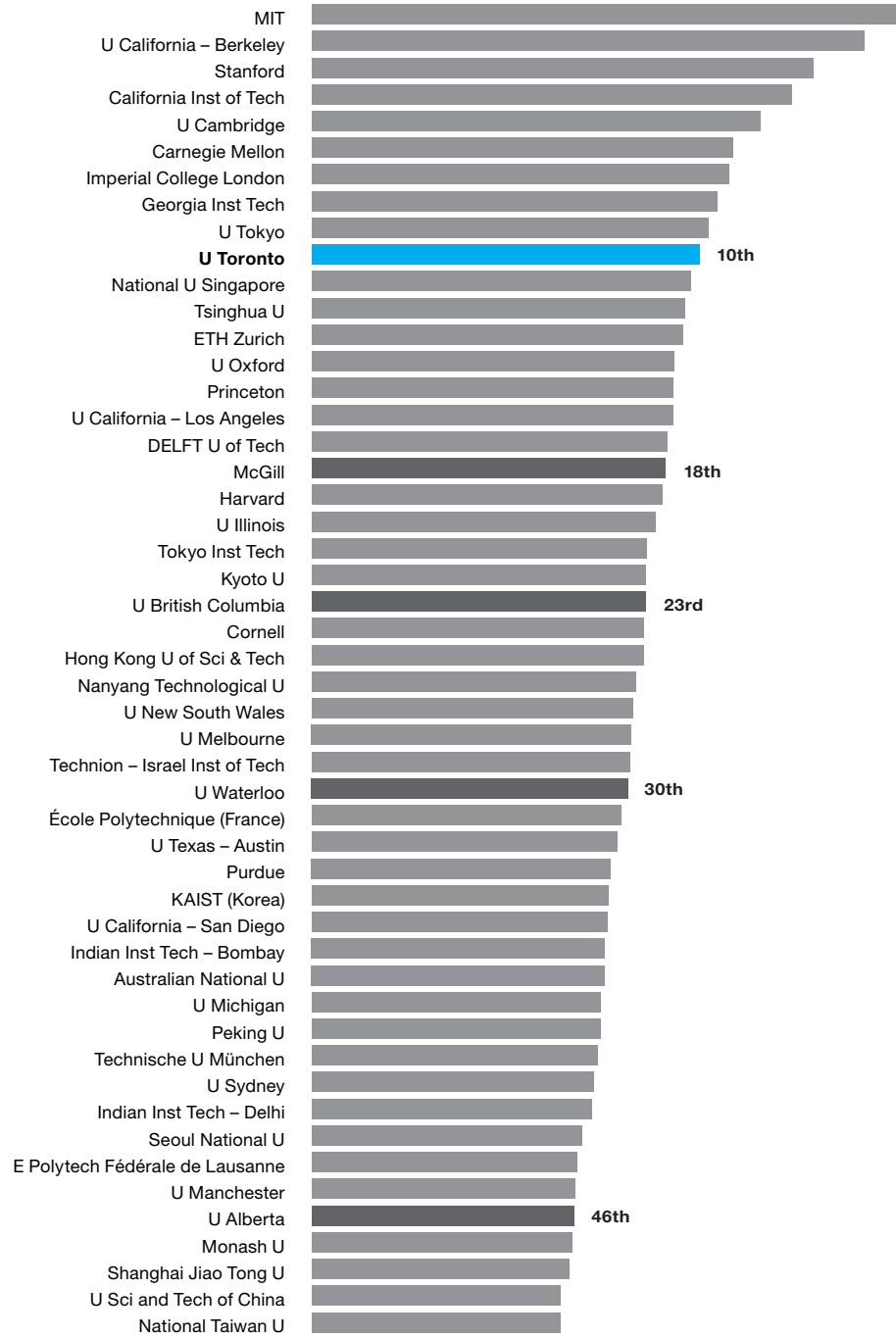
Similarly, the Shanghai Jiao Tong Academic Ranking of World Universities for Engineering/Technology and Computer Sciences ranked U of T Engineering first in Canada and 21st in the world in 2008, up from 23rd in 2007. And, the Faculty was first in Canada and 17th in the world in the Higher Education Evaluation & Accreditation Council of Taiwan (HEEACT) Performance Ranking of Engineering Papers for World Universities in 2008.

Rankings provide insights into disciplinary trends and comparative quantification. They are also useful in recruiting top scholars and students. But, with varying methodologies and data sets, they do not tell the whole story.

Bibliometric data highlight the Faculty's excellence in research. Our Faculty ranks 6th in the number of publications and 9th in the number citations among all public and private universities in North America – and first on both counts in Canada.

Figure 1.1a

Times Higher Education-Q.S. World University Rankings and U.S. News & World Report World's Best Colleges and Universities, Top 50 Universities for Engineering and Information Technology 2008–2009



The Faculty continues to be a global leader in the prestigious Times Higher Education-Q.S. (November 2008) and U.S. News & World Report (June 2009) rankings in the Engineering and Information Technology category. Up from 11th in 2007, the Faculty ranked 10th overall in the world in 2008. Remaining first among Canadian universities, U of T Engineering ranked 7th in North America.

The scoring for both the Times Higher Education-Q.S. and U.S. News & World Report rankings is based on four main indicators:

- Academic peer review
- Research performance (citations)
- Student-to-faculty ratio
- Survey of employers

The survey also takes into account the proportion of international faculty and international students. Final scores are compiled by multiplying each indicator by its weighting factor, rounding, then scaling – resulting in a final score out of 100. For the subject rankings, only academic peer review is considered.

Figure 1.1b

Canadian G13 in Top 100 from Times Higher Education-Q.S. and U.S. News & World Report for Engineering and Information Technology

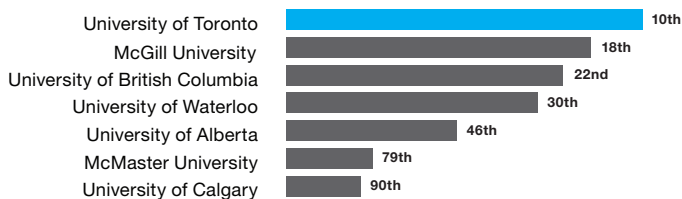
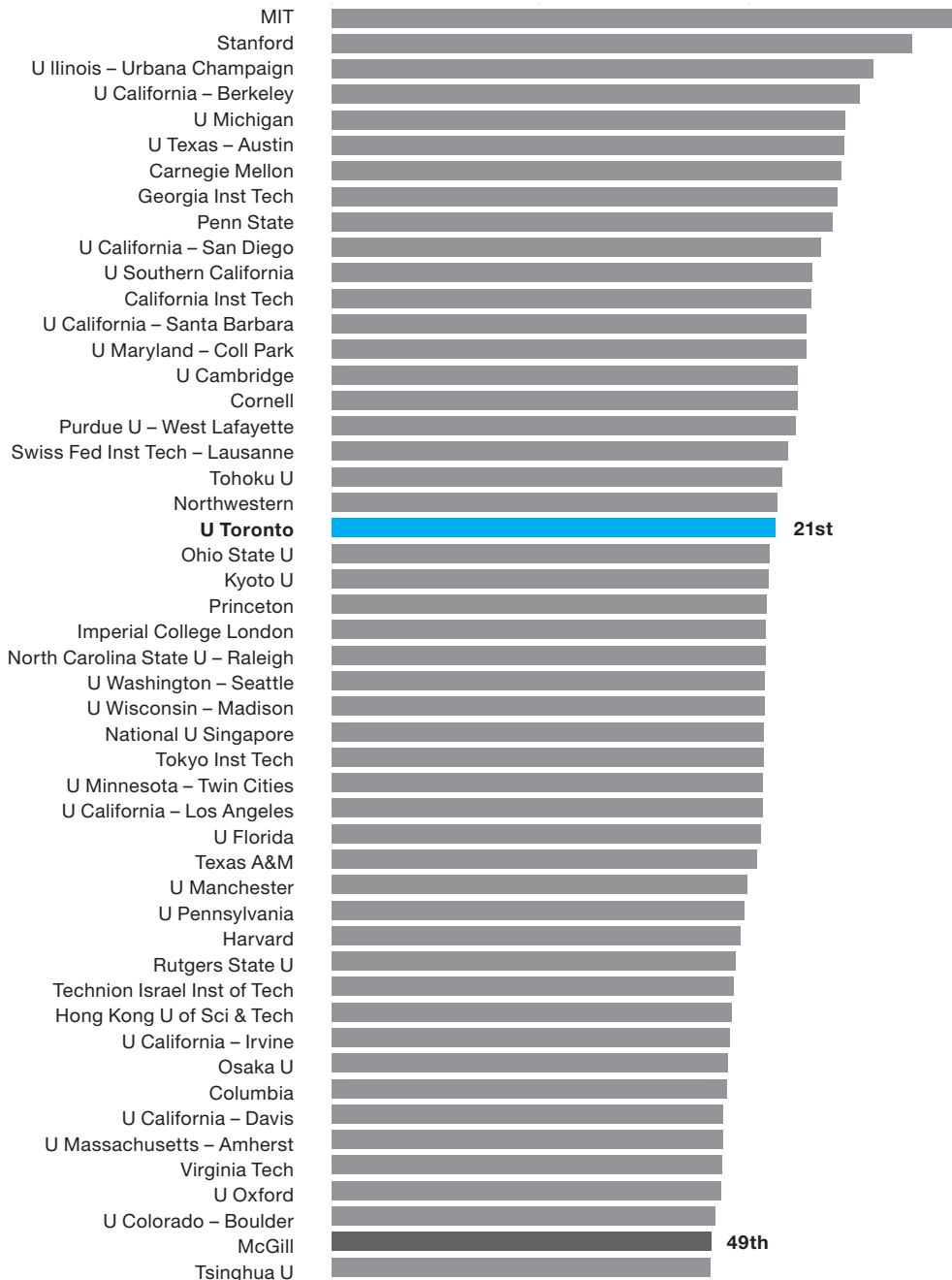


Figure 1.2a
Shanghai Jiao Tong Academic Ranking of World Universities
Top 50 Universities for Engineering/Technology and Computer Sciences
2008



The Academic Ranking of World Universities (ARWU) performed by Shanghai Jiao Tong University is a highly regarded ranking of research universities around the world based on internationally comparable third-party data.

The Engineering/Technology and Computer Sciences ranking is based on the following four indicators, each with a 25% weight:

- Highly cited research (HiCi)
- Published articles in the field (PUB)
- Percentage of articles published in the top 20% of journals in the field (TOP)
- Engineering research expenditure (FUND)

The highest scoring institution is assigned a total score of 100, and other institutions are calculated as a percentage of the top total score. The scores are then placed in descending order.

In 2008, U of T Engineering ranked 21st in the world, up from 23rd in 2007.

The research expenditure (FUND) in Canadian universities is accounted and reported differently than in their U.S. counterparts, which accounts for lower scores. The detailed analysis of scoring for each of the four indicators is shown on the next page, where U of T Engineering scores 1st in Canada and 14th and 16th in the world in HiCi and PUB, respectively.

Figure 1.2b
Canadian G13 in Top 100 from Shanghai Jiao Tong Academic Ranking for
Engineering/Technology and Computer Sciences

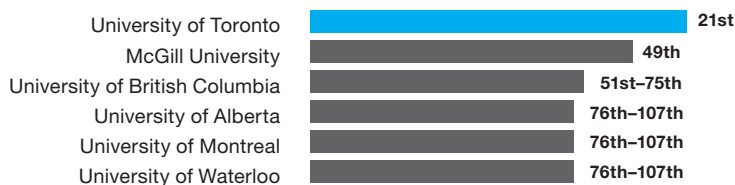
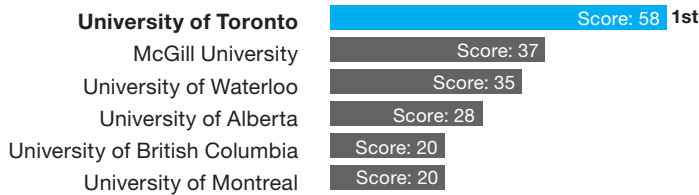


Figure 1.2c

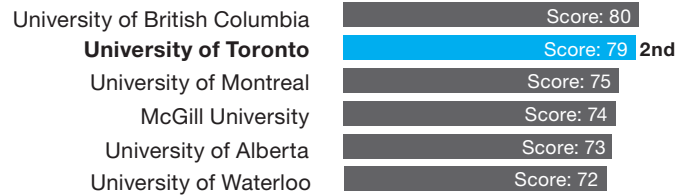
Scoring Analysis of Canadian G13 in Top 100 from Shanghai Jiao Tong Academic Ranking for Engineering/Technology and Computer Sciences

Below is a detailed analysis of the scoring for each of the four indicators used to determine the Shanghai Jiao Tong Academic Ranking for Engineering/Technology and Computer Sciences. Maximum score is 100. Only Canadian peer institutions in the top 100 are included.

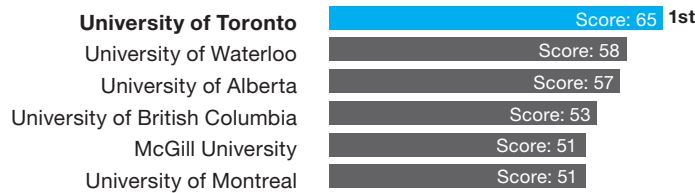
Scoring on Highly Cited Research (HiCi) Indicator



Scoring on Articles in Top Journals (TOP) Indicator



Scoring on Published Articles (PUB) Indicator



Scoring on Research Expenditure (FUND) Indicator

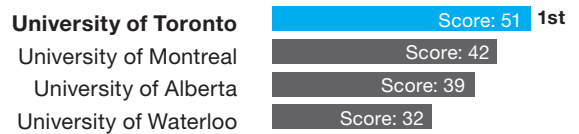
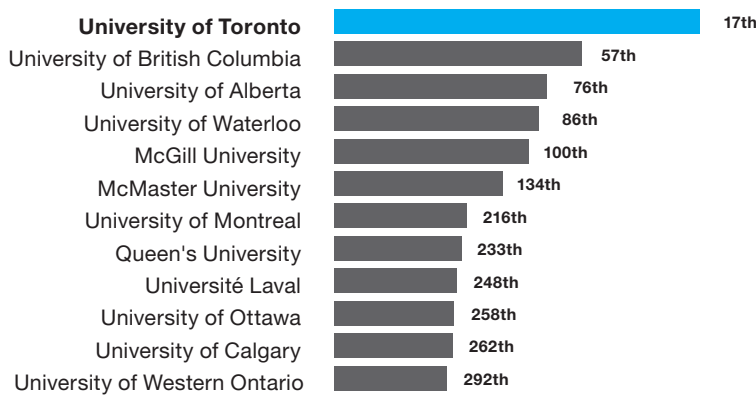


Figure 1.3

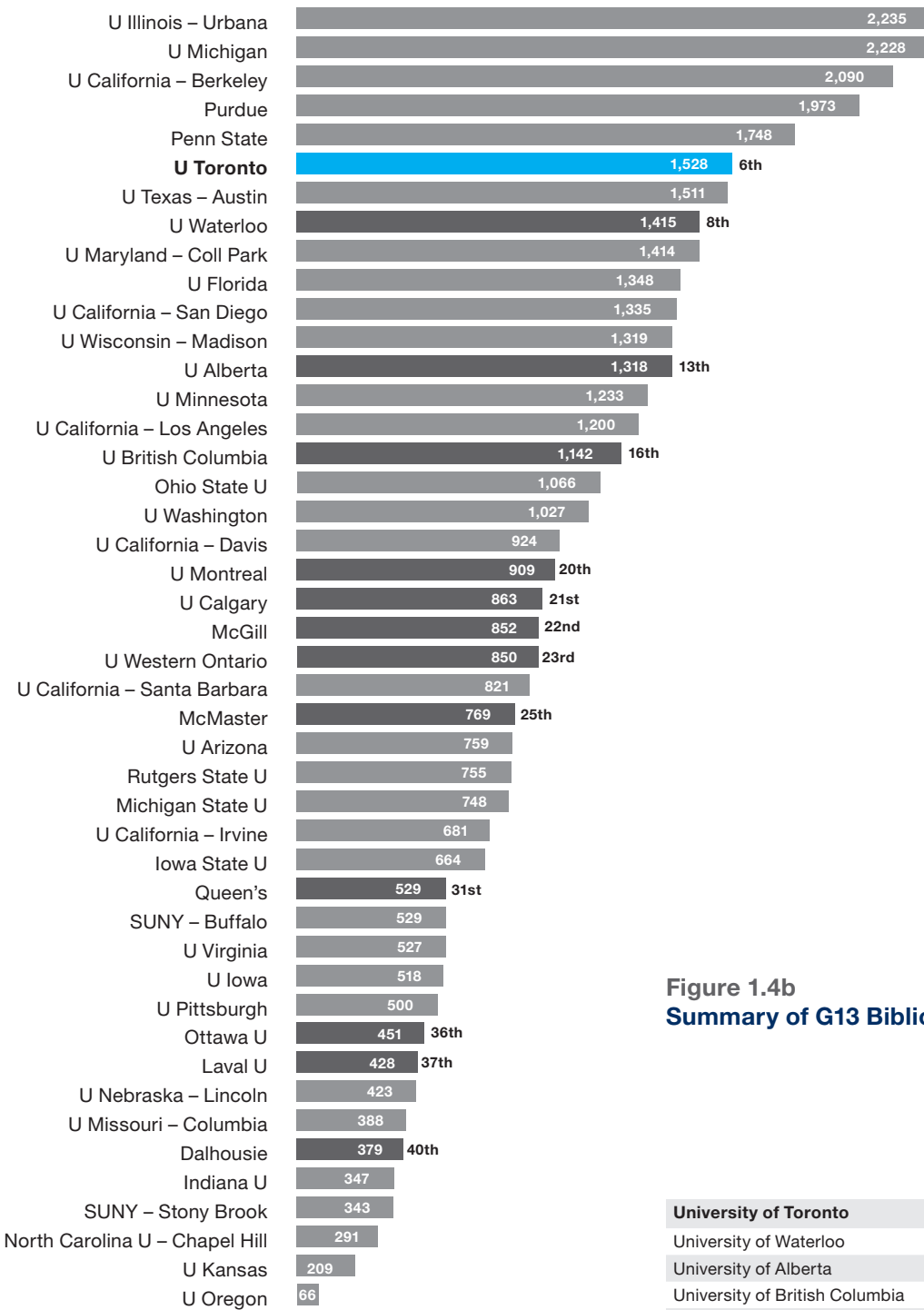
Higher Education Evaluation & Accreditation Council of Taiwan (HEEACT) Performance Ranking of Engineering Papers for World Universities 2008



The HEEACT bases its rankings on four criteria: the number of articles in the last 11 years, the number of citations in the last 11 years, the number of articles in the current year, and the number of citations in the last 2 years. The four basic criteria are further expanded to include indicators such as the number of articles published in high-impact journals.

U of T Engineering's 17th place standing in the world and first in Canada is an indicator of tremendous research productivity, impact and overall excellence.

Figure 1.4a
Number of Engineering Publications Indexed by Thomson Reuters
Association of American Universities (AAU) Public and Canadian Peer Institutions
2003–2007



Counts of publications and citations are important measures of research output, productivity and intensity relative to our Canadian and American peer universities.

When compared to our Canadian peer universities, U of T Engineering ranks first in the country for both engineering publications and engineering citations.

Figure 1.4b
Summary of G13 Bibliometrics for Publications

	Faculty Count	Publications	Publications per Faculty	Rank on Pub per Faculty
University of Toronto	223	1,528	6.9	4
University of Waterloo	225	1,415	6.3	5
University of Alberta	153	1,318	8.6	2
University of British Columbia	220	1,142	5.2	10
University of Montreal	232	909	3.9	12
University of Calgary	149	863	5.8	6
McGill University	149	852	5.7	7
University of Western Ontario	88	850	9.7	1
McMaster University	106	769	7.3	3
Queen’s University	97	529	5.5	8
Ottawa University	85	451	5.3	9
Université Laval	148	428	2.9	13
Dalhousie University	96	379	3.9	11

Figure 1.5a
Number of Engineering Citations Indexed by Thomson Reuters
Association of American Universities (AAU) Public and Canadian Peer Institutions
2003–2007

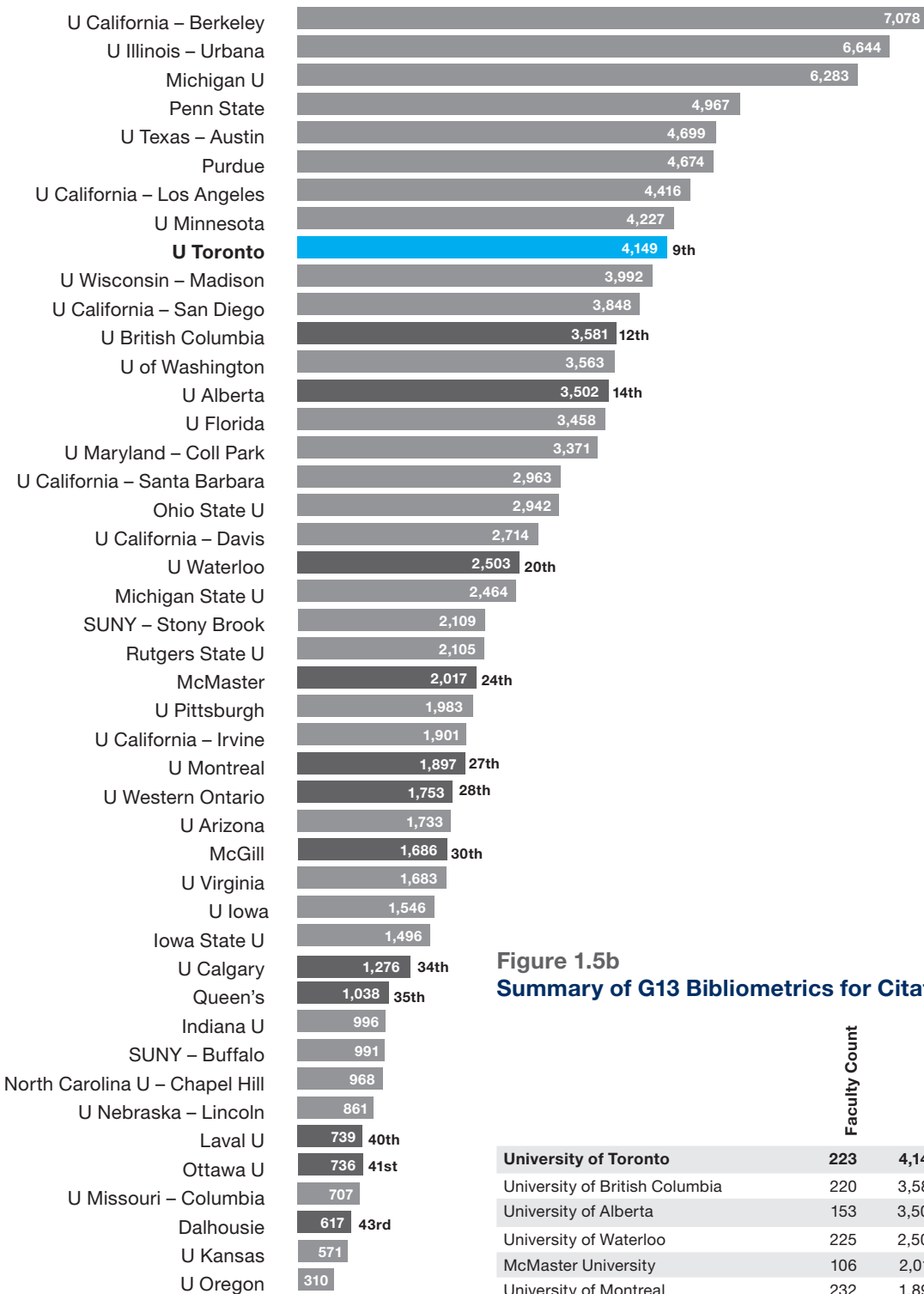


Figure 1.5b
Summary of G13 Bibliometrics for Citations

	Faculty Count	Citations	Citations per Faculty	Rank on Cites per Faculty	Citations per Publication	Rank on Cites per Pub
University of Toronto	223	4,149	18.6	4	2.7	2
University of British Columbia	220	3,581	16.3	5	3.1	1
University of Alberta	153	3,502	22.9	1	2.7	3
University of Waterloo	225	2,503	11.1	7	1.8	9
McMaster University	106	2,017	19.0	3	2.6	4
University of Montreal	232	1,897	8.2	11	2.1	5
University of Western Ontario	88	1,753	19.9	2	2.1	6
McGill University	149	1,686	11.3	6	2.0	7
University of Calgary	149	1,276	8.6	10	1.5	13
Queen’s University	97	1,038	10.7	8	2.0	8
Université Laval	148	739	5.0	13	1.7	10
Ottawa University	85	736	8.7	9	1.6	11
Dalhousie University	96	617	6.4	12	1.6	12