

Research Universities of the Year Ranking Method

Canada's Top 50 Research Universities List 2004 rank orders universities based on their total sponsored research income. In order to obtain a more balanced picture of how universities are performing, the Research Universities of the Year rankings take into account both financial input and research output indicators. The financial input indicator includes 3 measures: total sponsored research income, faculty research intensity and graduate student research intensity. The research output indicator comprises one measure: publication intensity.

Points were assigned for each measure, with the university faring the best in each category receiving 100 points and the last place universities receiving two points. Additionally, the three "input" criteria were then weighted back to 50 points with each individual measure worth 16.67 points for a total of a possible 50 points. The one "output" measure (publication intensity) was weighted to 50 points. The total score for each university was out of a possible 100 points.

Listed below is an explanation of each criterion.

A. Financial Input Indicators – measures that indicate each institution's success in attracting financial support to conduct research (total of a possible 50 points)

Financial data were obtained from Statistics Canada. Faculty and graduate student data were obtained from Statistics Canada, Conférence des recteurs et des principaux des universités du Québec (CREPUQ) and the Research Infosource University R&D Database.

1. Total Sponsored Research Income (worth 16.67 points)
 - Points are based on the university's Fiscal 2003 Top 50 rankings.
2. Faculty Research Intensity (worth 16.67 points)
 - Faculty research intensity is defined as total research income per full-time faculty position. Fiscal 2003 research income and 2002-2003 faculty data were used to calculate rank order and allocate points.
3. Graduate Student Research Intensity (worth 16.67 points)
 - Graduate student research intensity is defined as total research income per full-time graduate student. Fiscal 2003 research income and 2000-2001 full-time graduate student enrollment data were used to calculate and allocate points for this criterion.

B. Research Output Indicator – a measure that indicates each institution's success in publishing in peer-reviewed academic literature (total of a possible 50 points)

Publication data were obtained from Canadian Science and Innovation Indicators Consortium (CSIIC) using data from the Institute for Scientific Information (ISI). Faculty data were obtained from Statistics Canada.

1. Publication Intensity (worth 50 points)
 - One measure was used to calculate this half of the scorecard. Publication intensity is defined as the total number of publications (articles, reviews, notes, etc.) per full-time faculty, in 5,000 leading international journals covering different fields of natural science, life/health science and social science. It has been estimated that there is, on average, a 2-year lag time between research and publication. Calendar year 2001 was used for publication counts (the latest available data) and therefore 1998-1999 full-time faculty counts were used to calculate the ranking and allocate points.