

December 15, 2006

## **Senate Subcommittee on Women: Report on Hiring / Promotion of Women Faculty at McGill**

### **Subcommittee Members (2005 - 2006)**

Chair: Dr. Kathleen Cullen,  
Abby Lippman (Medicine), Shaheen Sheriff (Education), Gloria Tannenbaum (Medicine), Grace Fong (East Asian studies), Roe-Min Kok (Music), Mari Kaartinen (Dentistry), Shree Mulay (MCTRW), Susan Czarnocki (Libraries), Edith Zorychta (Pathology), Sarah Turner (Geography), Allison Gonsalves (Graduate Student Representative), Danielle Rodin (Undergraduate Student Representative)

### **Subcommittee Mandate**

The mandate of the Subcommittee is to make recommendations in the following areas:

- advocacy of women's rights and the promotion of women;
- initiation and consolidation of women's activities;
- liaison and networking for women.

The Subcommittee reports to the Senate Board Joint Committee on Equity.

### **Preamble**

In 2003, the Subcommittee initiated discussions on faculty hiring and the progress of women faculty through the professorial ranks at McGill University, and requested statistical information from the administration for review and analysis. The statistical data were converted into a consolidated and accessible form by Kathleen Cullen and Allison Gonsalves, and were presented to the Subcommittee at the meeting of Sept 28, 2005.

The data was then presented to the Joint Senate Committee on Equity on April 17, 2006. It was recommended by this Committee that the statistical analysis should be incorporated into a text-based report that provided more context for the findings, and circulated to the Deans of all faculties. In order to prepare this report, additional statistics were requested. In addition, student statistics were brought in to broaden the context and discussion.

This report is intended as a starting point and so poses more questions than provides answers. Its objective is to generate discussion, identify areas that may require further investigation, and recommend possible "next steps".

### **Full-Time Faculty: 1999, 2003 and 2006**

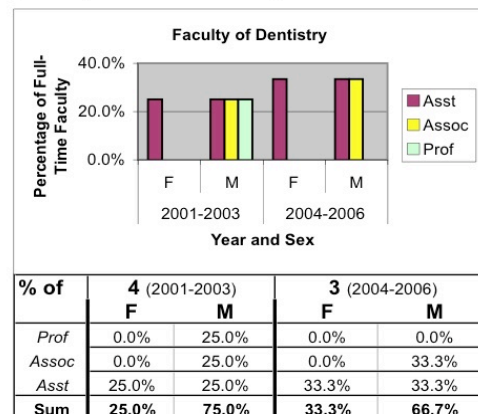
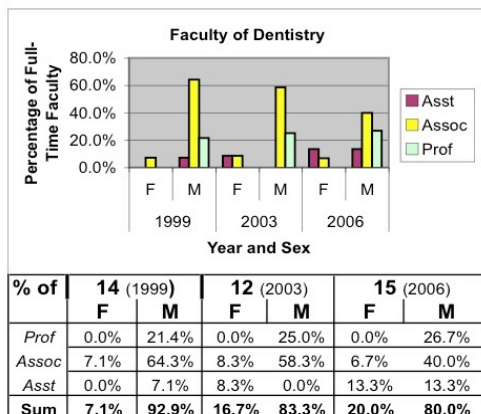
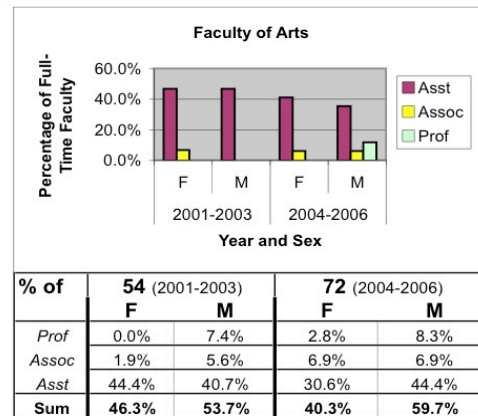
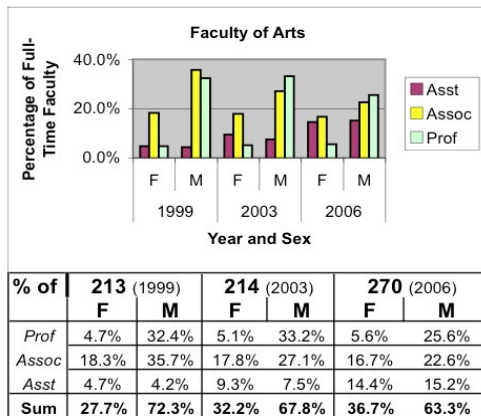
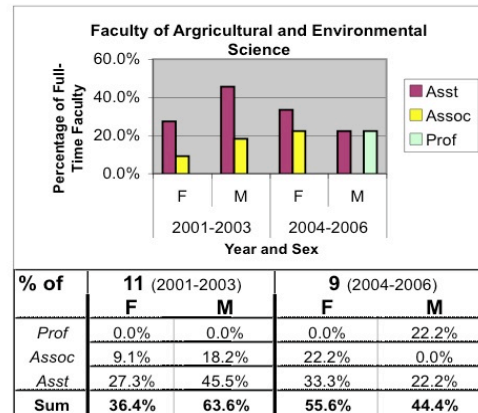
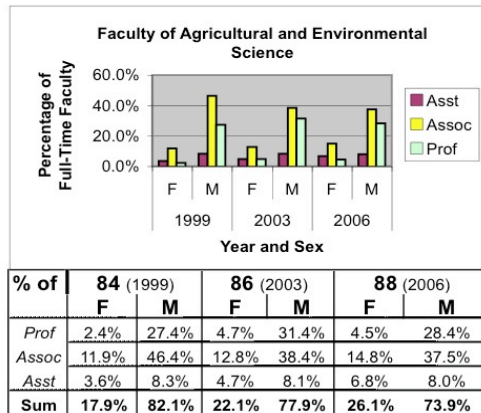
A 2001 Reporter article summarized the content of a memorandum sent to deans by then Vice-Principal (Academic) conveying his concern "that during the past three years only 25% of all new hires [had] been female."<sup>1</sup> The memorandum stated that "in order to attract highly qualified female academics, in future, all departments must produce a plan for soliciting female candidates (including contacting them); interview all female candidates who fall within the top 10% of applicants (if the short list doesn't already include a female candidate); and, where a woman is not hired, write a report listing the number of female candidates and explaining why none were selected."<sup>1</sup>

In light of this call to action, it is reasonable to ask whether five years later there are significant changes in representation of women across all faculties at McGill. More often than not, however, marked discrepancies still persist, most notably at the entry level where movement should be the most obvious at this point.

The full-time faculty levels compared below are Professor (Prof), Associate Professor (Assc), Assistant Professor (Asst). The female and male percentage totals has been calculated.

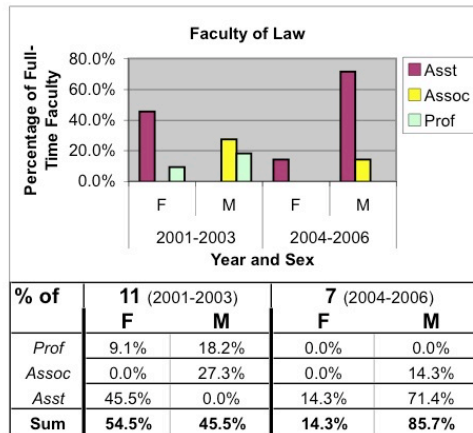
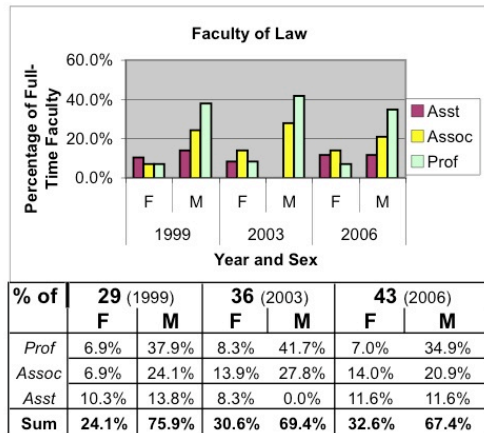
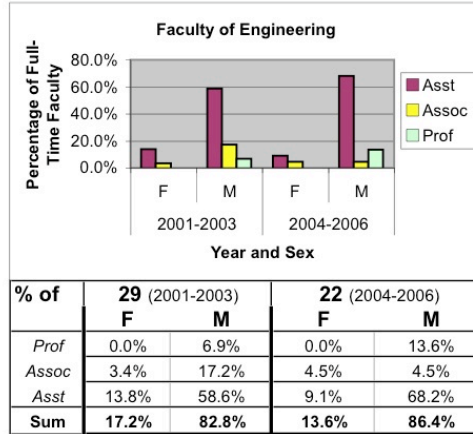
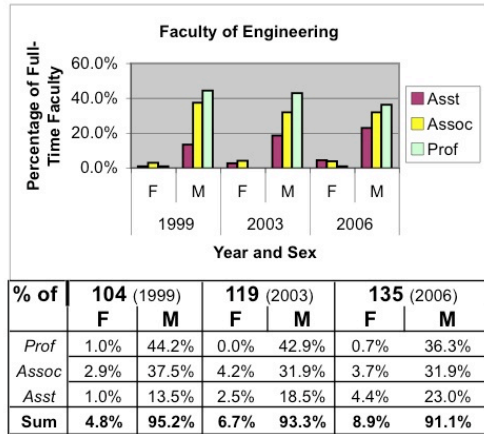
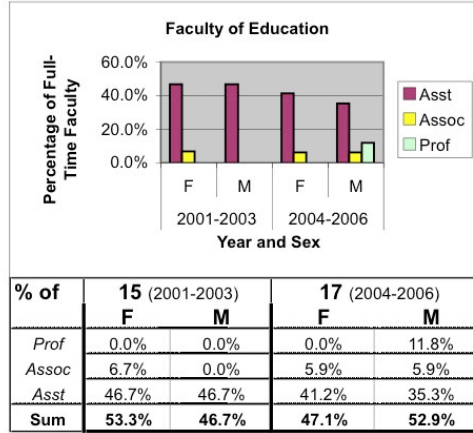
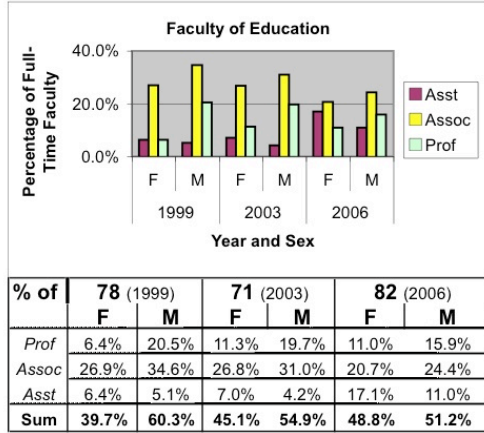
## Full-Time Faculty by Gender

## New Hires



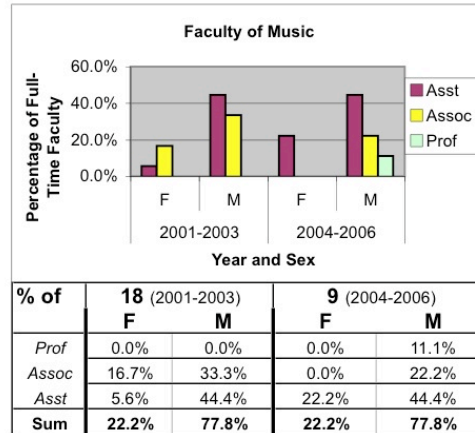
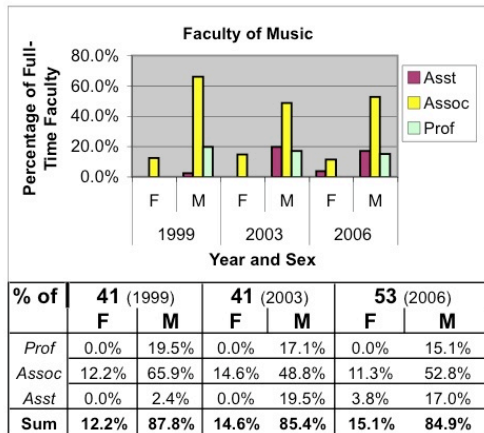
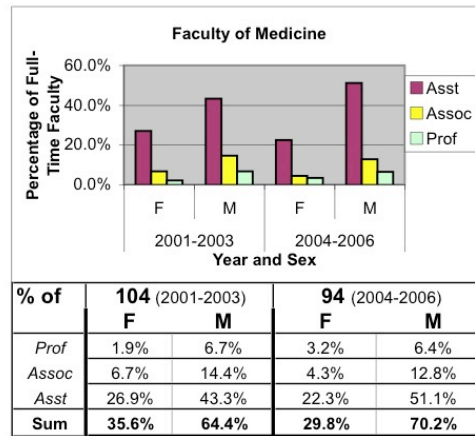
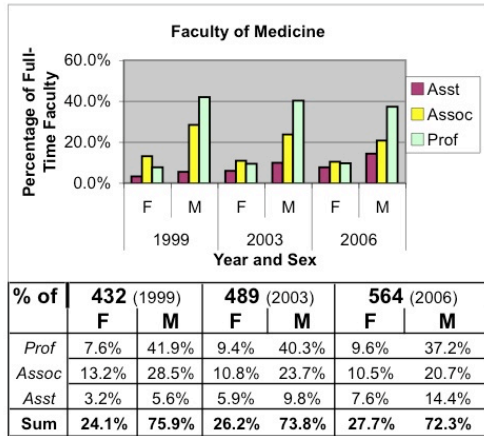
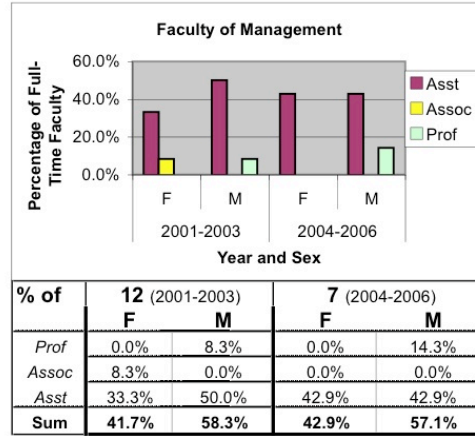
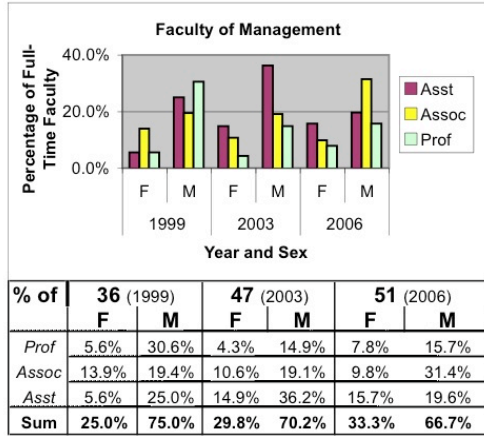
## Full-Time Faculty by Gender

## New Hires



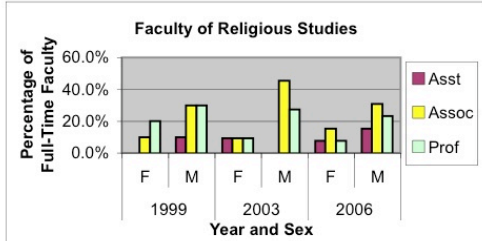
## Full-Time Faculty by Gender

## New Hires

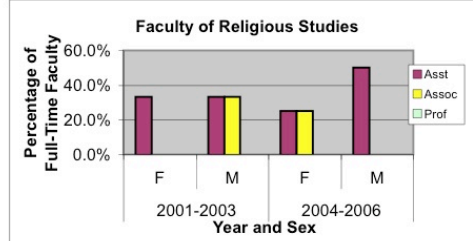


## Full-Time Faculty by Gender

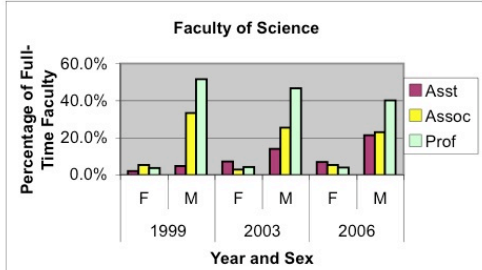
## New Hires



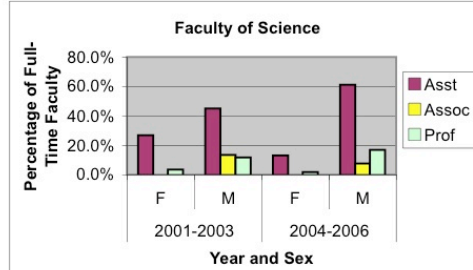
% of	10 (1999)		11 (2003)		13 (2006)	
	F	M	F	M	F	M
Prof	20.0%	30.0%	9.1%	27.3%	7.7%	23.1%
Assoc	10.0%	30.0%	9.1%	45.5%	15.4%	30.8%
Asst	0.0%	10.0%	9.1%	0.0%	7.7%	15.4%
Sum	30.0%	70.0%	27.3%	72.7%	30.8%	69.2%



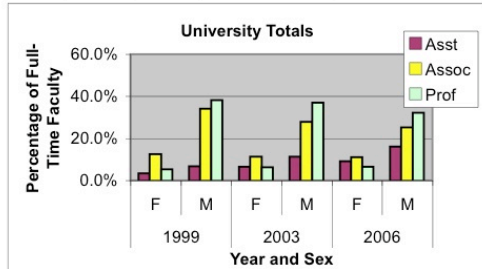
% of	3 (2001-2003)		4 (2004-2006)	
	F	M	F	M
Prof	0.0%	0.0%	0.0%	0.0%
Assoc	0.0%	33.3%	25.0%	0.0%
Asst	33.3%	33.3%	25.0%	50.0%
Sum	33.3%	66.7%	50.0%	50.0%



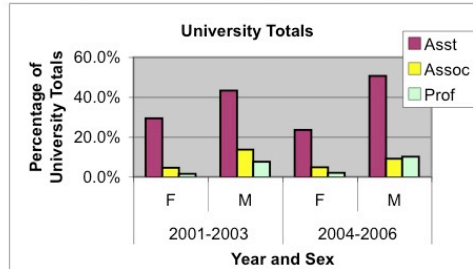
% of	196 (1999)		214 (2003)		254 (2006)	
	F	M	F	M	F	M
Prof	3.6%	51.5%	4.2%	46.7%	3.9%	40.2%
Assoc	5.1%	33.2%	2.8%	25.2%	5.1%	22.8%
Asst	2.0%	4.6%	7.0%	14.0%	6.7%	21.3%
Sum	10.7%	89.3%	14.0%	86.0%	15.7%	84.3%



% of	80 (2001-2003)		54 (2004-2006)	
	F	M	F	M
Prof	3.3%	11.7%	1.9%	16.7%
Assoc	0.0%	13.3%	0.0%	7.4%
Asst	26.7%	45.0%	13.0%	61.1%
Sum	30.0%	70.0%	14.8%	85.2%



% of	1237 (1999)		1340 (2003)		1568 (2006)	
	F	M	F	M	F	M
Prof	5.2%	38.2%	6.3%	36.9%	6.4%	32.3%
Assoc	12.4%	34.1%	11.2%	27.8%	11.0%	25.2%
Asst	3.4%	6.7%	6.6%	11.3%	9.1%	16.0%
Sum	21.0%	79.0%	24.0%	76.0%	26.5%	73.5%



% of	321 (2001-2003)		298 (2004-2006)	
	F	M	F	M
Prof	1.6%	7.5%	2.0%	10.1%
Assoc	4.7%	13.7%	4.7%	9.1%
Asst	29.3%	43.3%	23.5%	50.7%
Sum	35.5%	64.5%	30.2%	69.8%

### **Full Professors**

The full professor data reflects the history of hiring at McGill and dictates the current situation. In this context, the low number of females at the full professor level is not surprising. While nothing can be done to alter this record, as little hiring takes place at this level, it is, nonetheless, constructive to look at where we've come from and important to see how this compares with the present situation.

- There were more male than female full professors for the years 1999, 2003, and 2006, in every faculty.
- In most faculties the discrepancies were substantial.
  - Eight of the 11 faculties had discrepancies of more than 70% in 2003.
  - The gaps in 2003 for the three largest faculties were the following: Medicine 62%; Science 83%, Arts 73%.
  - For 2006, these numbers changed to: 59%, 82%, and 64%.
- Engineering, the fourth largest faculty, had one full female professor in 1999 and 2006 and none for 2003. Of the total full-time faculty in 2006, 37% were full professors.

### **Associate Professors**

The associate professor level is where one would initially expect to see the greatest reductions in discrepancies. All of the faculties have more male than female associate professors in all the years, and many of the gaps are similar to those seen at the full professor level. What does stand out, however, is that there are only three faculties in which there is any improvement at all. The only noteworthy one is Science, which moves from 2.8% in 2003 to 5.1% in 2006.

### **Assistant Professors**

The assistant professor statistics are of critical importance, as they represent not only the resources from which the future will be shaped, but also the response to the University's mandate and initiatives regarding equity.

By 2006 in particular, we would expect to see noticeable movement across the board with regard to the hiring of female faculty; however, the results reveal that a low percentage of females still persists at the entry level in almost all faculties.

- Of the eight faculties that had at least 35 full-time members in each year, only Arts and Education had numbers that approached equity at the assistant professor level. Arts, in fact, had slightly higher numbers of female faculty in 2003 (had 10.7% more women than men) and only had a 2% difference in 2006.
- By contrast, Science, which is similar in size to Arts, had a gap of 33% in 2003 and 52.1% in 2006.
- Medicine, the largest faculty, had discrepancies of approximately 30% in each year.
- The biggest discrepancies amongst these eight faculties in all years were in Music, Management and Engineering in 2003 (Management 41.7%; Engineering 76.2%, Music 100%). Although the Music and Engineering discrepancies remained high three years later in 2006 (Music 63.4%, Engineering 67.9%), Management made a huge improvement at the assistant professor level, with a discrepancy drop to 11.1%.

### **New Hires**

Ultimately, the most interesting data is the new hires category, particularly 2004 to 2006. Between 2001 and 2003, 35.5% of the total new hires by the University were women; this number dropped to 30.2% for the years 2004 to 2006. This is somewhat unexpected given the number of initiatives supported by the University, in particular Dr. Vinet's memorandum to the Deans.

There were some encouraging numbers: Agriculture and Environmental Science went from 36% in 2001-2003 to 55% in 2004-2006; similarly, Religious Studies went from 33% to 50%; and Management and Dentistry increased very modestly.

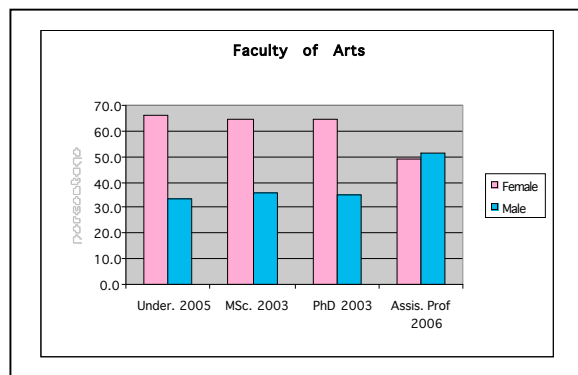
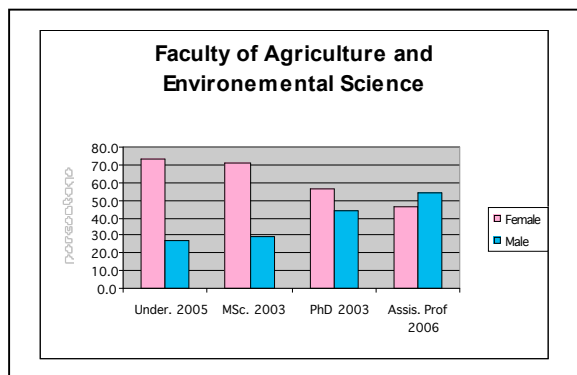
However, there was no improvement in any of the other faculties, with most of them showing greater disparities for 2004-2006. Law went from 54% to 14% and Science went from 30% to 15%.

What does this mean for the future? In many cases it is difficult to be optimistic about seeing much improvement any time soon when percentages of new hires and the pools from which females are promoted continue to be much smaller than those of their male counterparts. The hiring, tenure and promotion results will have to be continuously tracked to see what trends develop.

### Undergraduate Students 2005; MSc and PhD Students 2003

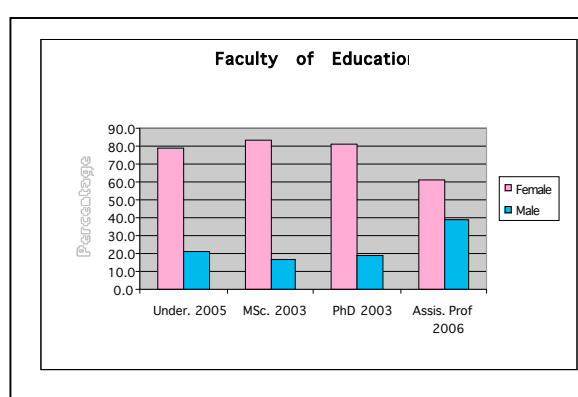
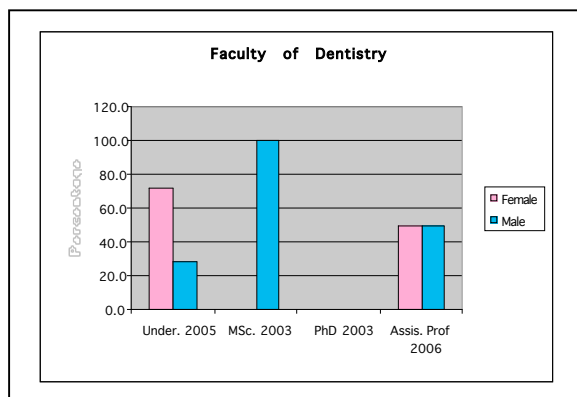
It is useful to relate the above statistics regarding assistant professors with the current student population (undergraduate and graduate) at McGill University. Overall, female representation contrasts sharply with the percentages at the faculty entry positions.

### Student to Faculty Ratios by Gender



	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
F	72.8%	71.0%	56.5%	46.0%
M	27.2%	29.0%	43.5%	54.0%

	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
F	66.2%	64.2%	64.7%	49.0%
M	33.8%	35.8%	35.3%	51.0%



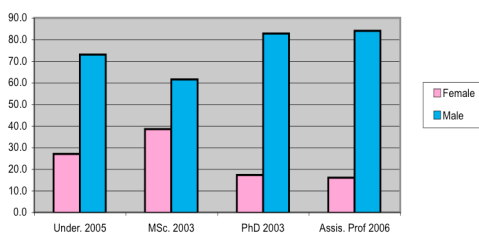
	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
F	71.9%	0%	0%	50%
M	28.1%	100%	0%	50%

	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
F	78.6%	82.9%	81.1%	61.0%
M	21.4%	17.1%	18.9%	39.0%



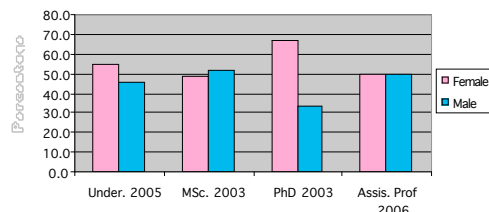
## Student to Faculty Ratios by Gender

Faculty of Engineering



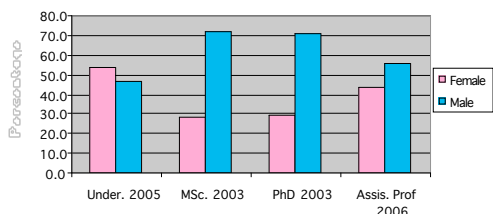
	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
<b>F</b>	26.9%	38.5%	17.3%	16.0%
<b>M</b>	73.1%	61.5%	82.7%	84.0%

Faculty of Law



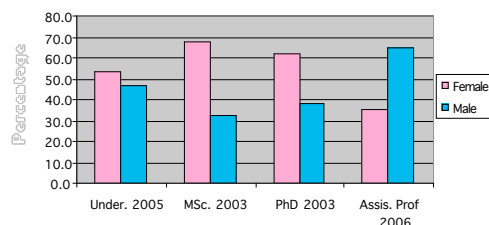
	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
<b>F</b>	54.7%	48.6%	66.7%	50.0%
<b>M</b>	45.3%	51.4%	33.3%	50.0%

Faculty of Management



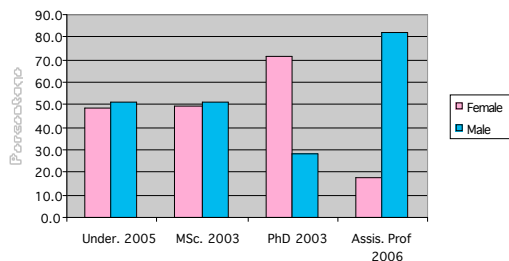
	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
<b>F</b>	53.5%	28.0%	29.4%	44.0%
<b>M</b>	46.5%	72.0%	70.6%	56.0%

Faculty of Medicine



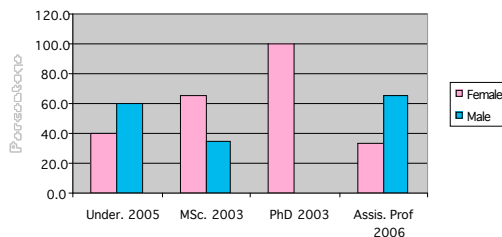
	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
<b>F</b>	52.9%	68.0%	61.7%	35.0%
<b>M</b>	47.1%	32.0%	38.3%	65.0%

Faculty of Music



	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
<b>F</b>	48.5%	49.2%	71.4%	18.0%
<b>M</b>	51.5%	50.8%	28.6%	82.0%

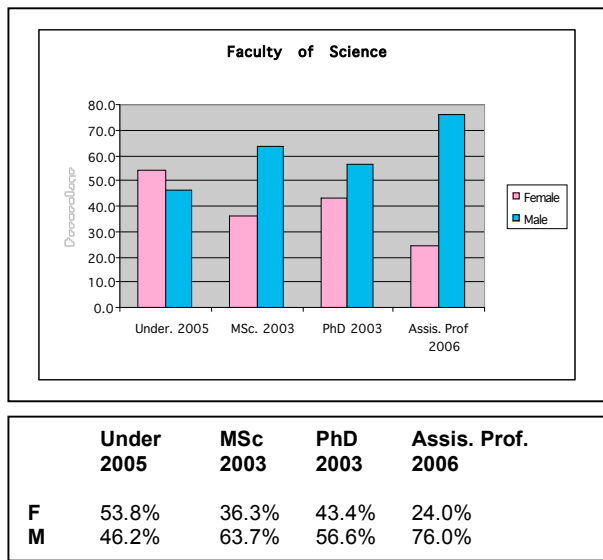
Faculty of Religious Studies



	Under 2005	MSc 2003	PhD 2003	Assis. Prof. 2006
<b>F</b>	40.0%	64.7%	100.0%	33.3%
<b>M</b>	60.0%	35.3%	0%	66.6%



## Student to Faculty Ratios by Gender



- There were more female than male undergraduate students in all faculties except Music, Religious Studies, and Engineering in 2005. The gap in Engineering is notably large (females 26.9%; males 73.1%).
- Female enrolment at the graduate level remains solid in most faculties except notably Management and Science. Engineering continues to have a disproportionate number of male students at this level as well.
- In the larger faculties (at least 50 faculty members), there are significant swings downwards in females numbers from the student to the assistant professor level in almost all cases. This includes Medicine, Science, Management, Agriculture and Environmental Science, Education and Music. The exception is Arts, which presents the most progressive picture with 66.6% at the undergraduate level and 55.8% at the assistant professor level.

From these numbers it is clear that discrepancies between female and male representation are more marked at the level of assistant professor than in either the undergraduate or graduate populations. The reasons for this need to be explored. Engineering's inability to attract females at any level needs to be investigated as well.

### Outside McGill: CAUT Report

According to CAUT, "the under representation of women within the ranks of academic staff has been a persistent and troubling feature of universities and colleges in Canada. While there have been some notable gains made in recent years, the academic work force today still remains largely dominated by men."<sup>2</sup>

Percentage distribution of full-time academic staff by gender and rank, Canada, 2003-04 <sup>2</sup>					
	Full Professor	Associate Professor	Assistant Professor	Other	All Ranks
Men	81.9%	65.9%	58.8%	45.8%	68.3%
Women	18.1%	34.1%	41.2%	54.2%	31.7%
Source: Statistics Canada					

Percentage distribution of full-time faculty by gender and country, 2003. <sup>2</sup>					
	Australian	Canada	New Zealand	United Kingdom	United States
Men	64.0%	68.3%	63.4%	64.9%	60.6%
Women	36.0%	31.7%	36.6%	35.1%	39.4%
Source: Australian Department of Education Science and Training; Statistics Canada; New Zealand; Association of University Teachers, UK; US Department of Education.					

The March 2006 Education Review indicated that these numbers pointed to “the need for more aggressive action to correct the gender imbalance in Canadian universities and colleges.”<sup>2</sup>

### **Outside McGill: Models for Change**

In 2002, MIT completed a “rigorous and systematic” review of the status of women in all faculties, following up on a 1999 report on the status of women in the School of Science.<sup>3</sup> Then, MIT president, Charles M. Vest, stated that “putting facts, figures and personal statements on the table for all to see enhances understanding, defines issues, and stimulates solutions”.<sup>3</sup> The 1999 initiative resulted in a significant increase in the number of women in leadership roles at MIT as well as an improvement in the collegial environment, according to Vest.

Systemic progress at MIT has not only included an increase in the appointment of women to academic leadership roles and the hiring of more women faculty, but also family/work policies, the revision of promotion policies to delay tenure decisions to allow for child-bearing, and paid release from teaching for care of a family member. The 2002 report went further, recommending new approaches to recruiting, hiring and promotion.

Following this MIT initiative, the leaders (presidents, chancellors, and provosts) of 9 top American research universities met in 2001 to discuss equitable treatment of women faculty. Present at this meeting were Presidents David Baltimore of the California Institute of Technology, Charles Vest of MIT, Lee Bollinger of the University of Michigan, Harold Shapiro of Princeton University, John Hennessy of Stanford University and Richard Levin of Yale University; Chancellor Robert Berdahl of the University of California at Berkeley; and Provosts Harvey Fineberg of Harvard University (representing President Neil Rudenstine) and Robert Barchi of the University of Pennsylvania (representing President Judith Rodin). They agreed that barriers still exist for women faculty and that institutions of higher education have an obligation to fully develop and utilize all the creative talent available. Since this meeting, much progress has been made towards developing initiatives and policies to address this problem. Harvard University, for example, established a University-wide task force on women faculty in 2005 to make recommendations for a series of specific institutional measures. The report of can be found at <http://www.hno.harvard.edu/gazette/daily/2005/05/women-faculty.pdf>. Harvard has already begun to implement many of these recommendations by means of a number of directed initiatives.

The importance of “rigorous and systemic” reviews, such as those undertaken at Harvard and MIT, cannot be underestimated. In the Reporter article cited above, it was noted that more than 10 years ago, McGill’s employment equity committee put forward recommendations similar to those of Dr. Vinet. In order to move forward and not in circles, there must be a permanent and systematic discussion on the subject of equity and faculty hiring at McGill.

### **What’s Next?**

An important “next step” in the equity review at McGill would be a comprehensive compilation and clear presentation of relevant statistics on an annual basis to monitor progress over the long term. This exercise could be expanded beyond the current report and consider up-to-date sampling of faculty lecturers and postdoctoral fellows, as well as of the categories considered above. In addition, a rigorous analysis should be done of the number of women in leadership roles at the University.

A set of questions should be designed to investigate the reasons for trends and discrepancies within certain Faculties and Departments. This could include questions such as “Why are women more likely to apply to certain faculties?” “Why is there such a large discrepancy between student and faculty ratios in certain Faculties/Departments?” “Are certain disciplines more women-friendly?” and “Could certain McGill policies be more women-friendly?”.

The subject of excellence—the touchstone of academic evaluation—should also come under review. For example, an objective investigation of the peer-review system of the Swedish Medical Research Council (*Nature* 1997) provided unequivocal evidence that scientific merit cannot be judged independently of gender. The study revealed that male achievements were systematically over-estimated and female performance

under-estimated, as demonstrated by “multiple-regression analyses of the relation between defined parameters of scientific productivity and competence scores”.<sup>4</sup>

The review of 114 post-doctoral applicants (62 men, 52 women) revealed that women were considered to be particularly deficient in scientific competence, which is generally regarded as being related to the number and quality of scientific publications. However, it was found that women with equal productivity consistently received lower competence ratings than their male counterparts. This was just one of a number of parameters that the researchers investigated.<sup>4</sup>

The study concluded that the development of peer review systems that resisted the weaknesses of human nature was a high priority in order. Otherwise, an enormous amount of promising talent would be wasted.<sup>4</sup>

### **Conclusion**

Despite over a decade of concern, McGill has made limited progress towards creating a genuinely diverse faculty. This report demonstrates that the women are most often substantially underrepresented in comparison to their numbers in the undergraduate and graduate student populations. It would be helpful to complete a similar analysis to see whether minorities are also significantly underrepresented in relation to their proportions in these same student populations.

It is recommended that in the coming year, McGill establish a University-wide task force to specifically address the issues of diversity and equity relative to its faculty. The goal of this task force would be to make concrete recommendations to address: 1) issues related to implementation of an effective structure for collecting and tracking data on an annual basis; 2) issues related to faculty recruitment; and 3) issues related to faculty retention, professional development and academic advancement.

### **References**

<sup>1</sup> Chester, Bronwyn. Striving for Equity. The Reporter. June 7, 2001. Volume 33, Number 17.

<sup>2</sup> Women in the Academic Workforce. CAUT Education Review 2006;8(1). [www.caut.ca](http://www.caut.ca)

<sup>3</sup> Massachusetts Institute of Technology. News Office. MIT completes ground-breaking studies on status of women faculty. Retrieved May 11, 2006 from [web.mit.edu/newsoffice/2002/print/genderequity-print.html](http://web.mit.edu/newsoffice/2002/print/genderequity-print.html)

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