

Gender-based Analysis of the Canada Research Chairs Program

A report prepared for the
Canada Research Chairs Secretariat

by

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Executive Summary

The Canada Research Chairs Program was created in response to a need to retain our talented graduates and to attract researchers to academic career, given the importance of university research to Canada's innovation agenda. It is expected to strengthen Canada's academic research base and help Canada play a leading role in natural sciences and engineering, health, and the social sciences and humanities from coast to coast. It will increase the capacity to generate new knowledge in every part of the country in both small and large universities.

The program's key objective is to encourage the building of a critical mass of world-class researchers in order to help Canadian universities (including their affiliated hospitals and research institutes) achieve research excellence.

Between 1987 and 1998, the number of doctoral degrees awarded to women more than doubled (112%). The number and proportion of female faculty has increased significantly in all discipline groups, since 1980. The highest proportion of female faculty is at the lower ranks, since the enhanced recruitment of female faculty is a relatively new phenomenon. In 1999, only about 14% of full professors were women compared to 31% at the associate and 42% at the assistant professor ranks.

In the course of the first three cycles, the Canada Research Chairs Secretariat observed that women appeared to be nominated for Tier 1 and Tier 2 Chairs in lower proportions than men and in lower proportions than might be expected from their representation among Canadian university faculty. Consequently, they requested an analysis of gender issues surrounding the Program. This analysis includes the nominations for the eight cycles for which nominations have been received and the results for the seven cycles completed, so far.

For the first eight Canada Research Chairs cycles, most (albeit not all) universities drew on their existing professorial resources: 84% of Tier 1 and 74% of Tier 2 nominees were drawn from Canadian universities. Therefore, the Canada Research Chairs cycle results were compared with the complement of faculty at Canadian universities in 1999, the latest year for which statistics were available.

The results of the analysis show that:

- For Tier 1 Chairs, the proportion of women nominated was slightly lower overall than the proportion of female faculty at the full professor level. This is due mainly to the CIHR disciplines, where the proportion of female nominees was only slightly more than half of the proportion of women at the full professor level in the Statistics Canada Health field.
- For Tier 2 Chairs, the proportion of female nominees was also lower overall caused by a low proportion in the SSHRC and CIHR disciplines compared to their proportion among the assistant and associate professor ranks in the Statistics Canada Humanities and Social Sciences (HSS) and Health fields.

- As expected, nominees for Tier 2 Chairs were drawn mainly from the assistant and associate professor ranks, although associate professors dominated in the SSHRC disciplines. This was true of both male and female nominees.
- The proportion of women nominated to Tier 2 Chairs in SSHRC disciplines was significantly lower than their proportion among the faculty. This was the case in several individual disciplines where the proportion of female faculty is high.
- Female nominees are less likely than males to be recruited from foreign institutions and are more likely than males to be recruited from Canadian universities other than their university of origin.
- There were no identifiable differences in the overall success rates between male and female Chair nominees.
- There was a large variation among universities regarding the nomination of women as candidates for Chairs. Universities with an allocation between 20-70 Chairs were less likely to have nominated women than universities with a larger allocation (70 Chairs or more).

The conclusions drawn from this study are that:

- Overall, the Canada Research Chairs approval's process does not discriminate against women nominees.
- There are several sub-disciplines/fields where women are under represented among the Canada Research Chair nominees. In part, this may be due to the lesser "research maturity" of some disciplines where women are present in large proportion. In part, however, this under representation stems from the slow rate at which most universities have sought out and nominated women for Chairs, especially for Tier 2 Chairs.

Introduction

After receiving the nominations the first three cycles, the Canada Research Chairs Secretariat observed that women appeared to be nominated for Tier 1 and Tier 2 Chairs in lower proportions than men and in lower proportions than their representation among Canadian university faculty. Consequently, the Chairs Secretariat requested a preliminary analysis of gender issues surrounding the Program. The preliminary analysis, completed in June 2001 included data from the first three cycles. Having now completed eight nomination cycles¹, the Chairs Secretariat requested an update. The entire Chairs database was made available for this update, enabling a more detailed analysis than the previous one.

Program Profile

Description of the background factors leading to the creation of the Program

Given the needs to balance budgets and pay down the debt, the 1990s saw a period of under funding in research and post secondary education, which was associated with ever increasing difficulties for universities to attract and retain talented researchers.

Canadian universities have lost about 3,500 faculty since 1992 due in large part to universities' inability to replace retiring faculty owing to cuts to university core budgets. Meanwhile, AUCC estimates that Universities' hiring requirements will be between 2,500 and 3,000 new faculty a year until 2006.² This intense need for faculty risks quickly depleting the talent pool. In the last three years for which statistics are available, the rate of graduation of doctoral degree holders at Canadian universities was less than 4,000 per year (see **Table 1**). Many of these new graduates leave the country for further training or better opportunities and many are attracted to positions in government and industry. While approximately 2,500 doctoral degree holders enter the country each year, the majority of them do not undertake academic careers.³

There is, therefore a continuing need to retain our talented graduates and to attract researchers from other countries or other sectors to academic careers in Canadian universities.

¹ The cycles are as follows: 2000-1 and 2000-2; 2001-1, 2001-2, 2001-3, and 2001-4; 2002-1 and 2002-2, or nomination cycles 1-8.

² L. Elliot: Revitalizing universities through faculty renewal. AUCC Research File, March 2001

³ H. O'Heron: Private communication.

Table 1⁴ Doctoral Degrees Awarded by Discipline Group and Gender, by Year 1996-98

	Year	Male	Female	Total	% Female
All Disciplines	1996	2,563	1,322	3,885	34.0
	1997	2,492	1,387	3,879	35.8
	1998	2,515	1,430	3,945	36.2
Humanities	1996	287	226	513	44.1
	1997	261	241	502	48.0
	1998	268	229	497	46.1
Social Sciences	1996	531	525	1,056	49.7
	1997	479	572	1,051	54.4
	1998	514	591	1,105	53.5
Natural and Applied Sciences	1996	1,176	206	1,382	14.9
	1997	1,184	177	1,361	13.0
	1998	1,145	233	1,378	16.9
Life Sciences	1996	569	365	934	39.1
	1997	568	397	965	41.1
	1998	588	377	965	39.1

Source: Canadian Association for Graduate Studies

The improving economic climate of the late 1990s, coupled to the realization by governments that Canada must embrace a knowledge economy, spurred a national reinvestment in research and innovation mainly through the creation of the Canada Foundation for Innovation, the increase of the budgets of SSHRC and NSERC, and the creation of Canadian Institutes of Health Research (CIHR).

The government of Canada is cognizant of the important contribution of universities in research and innovation and of the intense competition they are facing in attracting and retaining the best researchers. Consequently, in its 2000 budget, the Government provided \$900 million to support the establishment of 2,000 Canada Research Chairs in universities across the country by 2005; the potential existed to name 400 new chairs holders in each of the next five years.

Description of the Program's mandate and objectives

The Canada Research Chairs program is expected to strengthen Canada's academic research base and help Canada play a leading role in natural sciences and engineering, health, and the social sciences and humanities from coast to coast. It will increase the capacity to generate new knowledge in every part of the country in both small and large universities.

⁴ 1998 is the last year for which data on graduations are available from Statistics Canada.

The program's key objective is to encourage the building of a critical mass of world-class researchers in order to help Canadian universities (including their affiliated hospitals and research institutes) achieve research excellence.⁵

The secondary objectives of the Canada Research Chairs Program⁶ are to:

- strengthen research excellence in Canada and increase Canada's research capacity by attracting and retaining excellent researchers in Canadian universities;
- strengthen the training of highly qualified personnel through research;
- improve universities' capacity for generating and applying new knowledge;
- optimize the use of research resources through institutional strategic planning, and inter-institutional and inter-sectoral collaboration.

Overview of the Program's structure, indicating areas of responsibility

The Canada Research Chairs Program structure is described in the Program Guide. Essentially, the total number of Chairs has been divided among discipline groups according to disciplines funded by each of the federal granting agencies. 120 Chairs (6 %) are used for special allocations. Chairs are allocated to institutions and not individuals. The number of Chairs allocated to a given institution is proportional to the amount of research funding received from the federal granting agencies calculated on a three-year rolling average. Special provisions exist for smaller institutions. There are two types of Chairs. Tier 1 Chairs are reserved for senior investigators and Tier 2 Chairs are meant to fund promising, more junior investigators. Smaller institutions have "Special Chairs," which they are free to allocate as to Tier and discipline in the combination that best suits each institution's needs.

⁵ Budget 2000 http://www.fin.gc.ca/budget00/bpe/bpch5_1e.htm#Investing

⁶ Canada Research Chairs Program Guide <http://www.chaires.gc.ca/english/program/guide/>

The responsibilities of the Chairs Secretariat and Steering Committee and of the Universities are summarized in **Table 2**.

Table 2. Responsibilities	
Chairs Secretariat and Steering Committee	
Establish a mechanism for the final allocation of Chairs to institutions	
Appoint a College of Reviewers	
Appoint an Interdisciplinary Review Committee	
Carry out the evaluation of nominees on a timely basis	
On a yearly basis, review allocations against the federal granting agencies funding results and amend, as necessary	
Maintain appropriate statistics and databases	
Perform reviews of the program at stated intervals	
Universities	
Prepare and submit a Strategic Research Plan	
Seek out candidates for Tier 1 and Tier 2 Chair positions	
Evaluate nominations for Chair awards against institutional Strategic Research Plan and admissibility criteria, through an institutional process	
Submit appropriate nominations to the Chairs Secretariat	

Source: Canada Research Chairs Program Guide

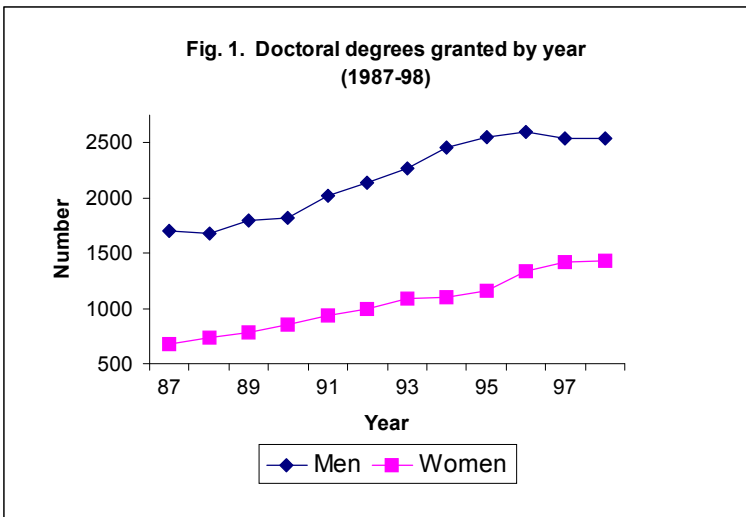
Gender-based analysis of the Canada Research Chairs Program

The sources of information used for the following analysis are listed in Annex 5. The latest detailed statistics available from Statistics Canada at the time of writing were those of 1998 for student data, and of 1999 for faculty data.

Demographic/gender make-up of Canadian university graduates.

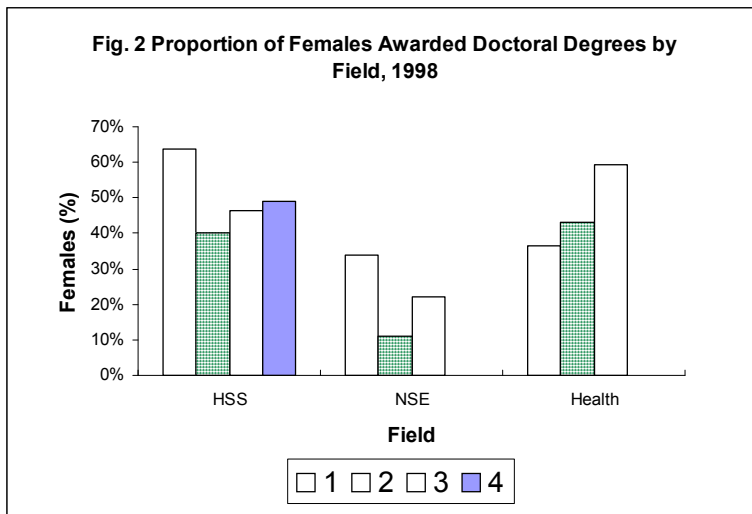
The number of undergraduate degrees earned by males has remained fairly constant over the period from 1987 to 1998. By contrast, approximately 35% more females earned undergraduate degrees in 1998 than in 1987.

The change in female master's degree holders during the same period was even more dramatic. While both the numbers of males and females receiving master's degrees increased, for females the numbers increased by nearly 60% compared to 20% for males. As a result, the number of female master's degree graduates surpassed that of males from the mid-1990s onwards.



Between 1987 and 1998, the number of doctoral degrees awarded to women more than doubled (112%). For men, the increase was 50% during the same period (**Fig. 1**). This means that, in 1998, females received 36% of doctoral degrees. In 1998, 3970 doctoral degrees were awarded by Canadian universities. AUCC estimates that 4,100 doctoral degrees were awarded in 2001.⁷ Although official statistics are not available, it

appears that the trends evident since the mid-1990s are continuing: a stable male participation and an increasing female participation.⁸



The proportion of female doctoral degree recipients varies considerably by discipline group. The data in **Fig. 2**⁹ have been segregated according to the Statistics Canada fields and sub-fields to allow comparisons with faculty data (for more detail, see Annex 3, Table 3-3).

In the Humanities and Social Sciences (HSS) disciplines, the proportion of females earning doctoral degrees was more than 50% overall, with over 60% for education (Ed), 40% for fine and applied arts (FAA), and over 45% for Humanities (H) and Social Sciences (SS). In the

Natural Sciences and Engineering (NSE), agricultural and biological sciences (ABS) have the largest proportion of female graduates (34%), followed by mathematics and physical sciences (MPS), 22%, and engineering and last, engineering and applied

⁷ Research Money, 16 (16), Oct. 21, 2002, p.3.

⁸ H. O.Heron: Private Communication

⁹ The disciplines within the Health field were grouped under areas for the purpose of this analysis; of necessity, some of the groupings are fairly arbitrary. See Annex 3, Table 3-3 and accompanying text.

sciences, (EAS) 11%. Overall the proportion of female graduates in NSE was 21.1%. In the Health fields, the largest proportion of female doctoral graduates (60%) was in the health professions (HP); however, the total number of graduates was very small, accounting for less than 2% of all doctoral graduates. The clinical sciences (CS) and basic medical sciences (BMS) both had over 40% female doctoral graduates.

Demographic/gender make-up of Canadian university faculty

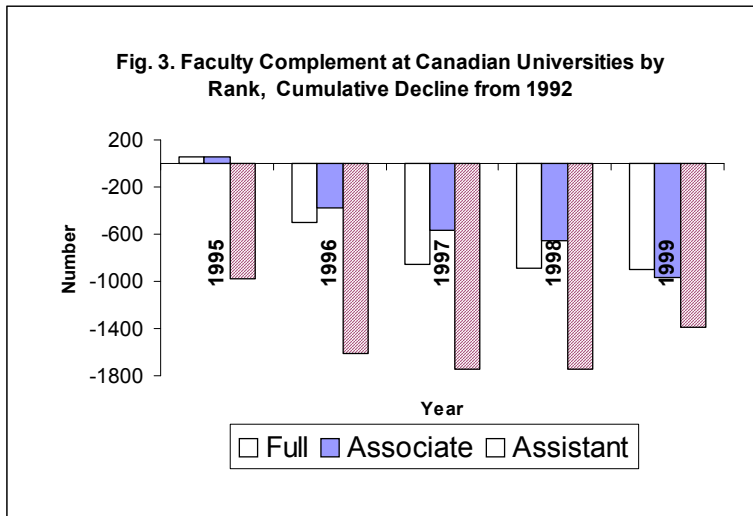


Fig. 3 shows the cumulative decrease in faculty complement in Canadian universities from 1992. The decline in the number of assistant professors reflects the effect of the budget cuts that occurred in universities across the country in the second part of the 1990s, which limited recruitments at that level. The situation improved in 1999 and should continue to improve as the Canada Research Chairs programs reaches maturity.

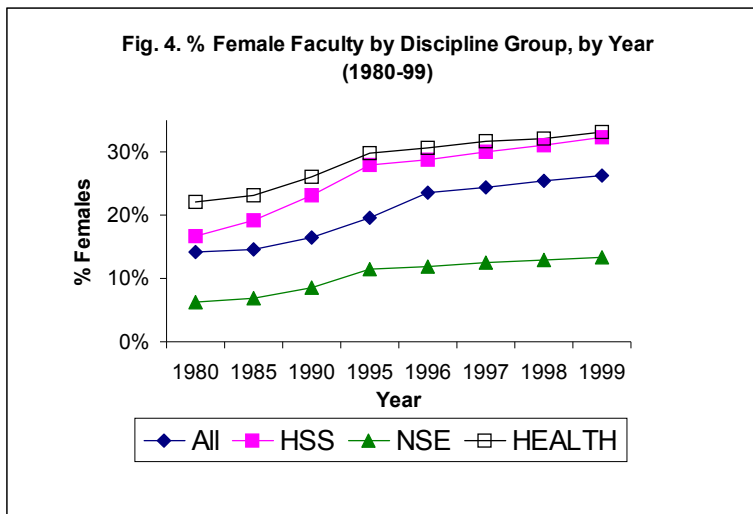
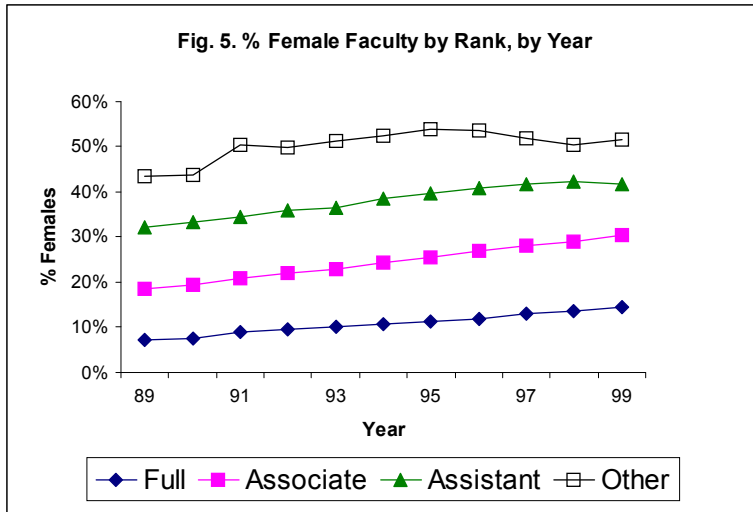
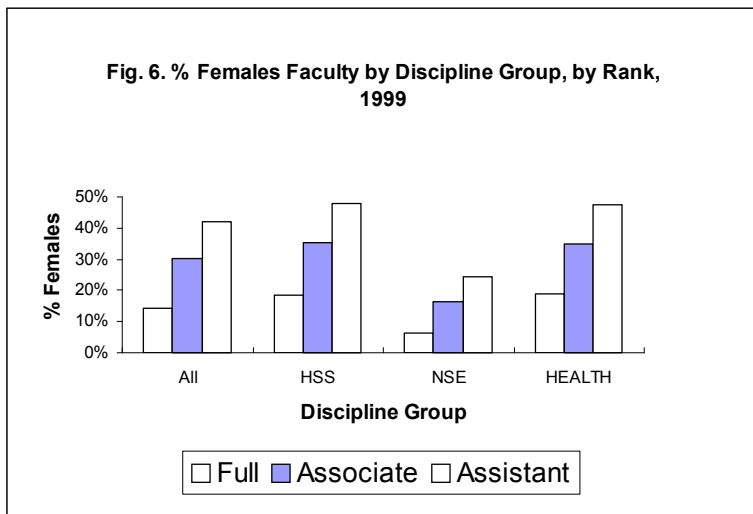


Fig. 4 shows the significant increase in the proportion of female faculty in all discipline groups since 1980 (note, however, that the data are given for every five year between 1980 and 1995 and yearly thereafter). The trends are similar in all discipline groups (Statistics Canada "Fields"), but the NSE group has much lower proportions of female faculty. (See Annex 2 for the actual numbers.)



The highest proportion of female faculty is at the lower ranks (**Fig. 5**). This is predictable since the enhanced recruitment of female faculty is a relatively new phenomenon. Thus, only about 14% of full professors were women in 1999 (up from approx. 7% in 1989). For associate professors, comparable values are 31% in 1999 and 19% in 1989, and for assistant professors, 42% and 32%. The proportion of female assistant

professors has remained stable at around 41% since 1996. The proportion of women is highest at “other” ranks, which are not likely to be associated with a requirement to carry out research and may not give access to the tenure track. Also, the numbers in that category accounted for only 4% of the total faculty complement in 1999.



The data on the proportion of female faculty by rank and discipline group in 1999 (**Fig. 6**) mirror those in Figs. 4 and 5. In 1999, the patterns of distribution of female faculty according to rank were similar for all discipline groups, but the NSE disciplines had a noticeably lower proportion of females at all ranks.

Gender-based statistical analysis of the pool of researchers available to universities

The pool of researchers available to Canadian universities is first of all their own faculty. The gender distribution of Canadian university faculty in 1999, by discipline groups is given in **Fig. 6**. Secondly, the new recruits at the assistant professor level is most likely to come from the pool of recent Canadian doctoral graduates; those graduated since 1996 are the most likely current recruits (see **Table 1**)¹⁰. However, given that the number of doctoral students currently graduating each year is unlikely to be able to meet the needs predicted by AUCC at least for the years until 2006 (see Table 1 and associated text), it is probable that Canadian universities will need to recruit abroad. Currently, it seems that the majority of doctoral graduates entering the country do not embrace an academic career. However, improving conditions and programs such as the Canada Research Chairs, the Canada Foundation for Innovation and the increased budgets of the federal granting agencies should contribute to make careers in academia more attractive.

Comparison of the pool of researchers available with the statistics on nominations to the Canada Research Chairs Program

Assumptions made in this study.

- (1) The pool of researchers for the first eight Canada Research Chairs Program cycles came largely from Canadian university faculty.

For the first eight Canada Research Chairs cycles, most (albeit not all) universities drew mainly on existing resources within Canadian universities: 84% of the nominees for Tier 1 Chairs and 74% of Tier 2 Chairs were drawn from Canadian universities. As well, female were less likely than male nominees to be recruited from outside Canada (9.4 vs 15% of nominees for Tier 1 Chairs and 21 vs 26.3% for Tier 2 Chairs. (See Annex 3, Table 3-1 for further details). For the present analysis, it is still adequate to compare the Canada Research Chairs nominations with the current complement of female faculty at Canadian universities. However, as universities increase their recruitments abroad as they are expected to do, the pool of potential applicants will expand. Similarly, as more junior recruits are nominated for Tier 2 Chairs, the pool will likely include a larger number of nominees who are moving from the doctorate or postdoctoral training to faculty positions and would not be included in current faculty numbers.

¹⁰ Many doctoral graduates undertake postdoctoral training in Canada and abroad. Apart from those funded directly by granting agencies, which represent a minority, there are no reliable statistics that would allow an assessment of the pool of postdoctoral trainees.

- (2) The gender distribution of faculty at Canadian universities has not changed significantly since 1999, the last year for which detailed statistics are available.

No official information is available; however, the trends observed in Fig. 5 are expected to continue.

- (3) The majority of Tier 1 nominees are at the full professor level, whereas the Tier 2 nominees are associate and assistant professors (Ac+At), as expected from the eligibility guidelines in the Canada Research Chairs Program Guide (see Annex 1).

The data supporting this assumption are shown in Figs. 8 and 9 below, and in Annex 3 (Table 3-2).

- (4) The discipline groupings for the Canada Research Chairs statistics are similar to those used by Statistics Canada (see footnote 8).

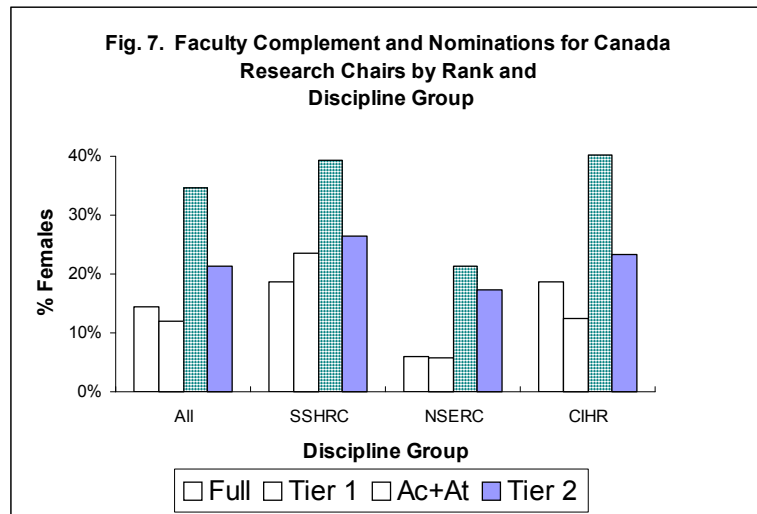
The Statistics Canada data are organized under traditional fields and subfields. The advent of interdisciplinary research and in the evolution of disciplines mean that the traditional faculty classification may no longer necessarily represent the nature of their research activities. For example, for the Statistics Canada data all of psychology is classified under Social Sciences while, in reality, researchers apply to any of the three granting agencies depending on their research interests. Another limitation of the Statistics Canada data for use in the assessment of research programs is that they capture “teaching” faculty. It is not clear that all universities include research staff (non-tenure stream or status only faculty) from their affiliated institutes and hospitals in these counts.

The all encompassing nature of the CIHR mandate means that it does not fund only research in the basic and clinical health sciences like its predecessor, the Medical Research Council of Canada (MRC)¹¹, but also research in disciplines covering the whole spectrum of health research from History and Philosophy through to Computing, Physics and Engineering.

While overtime, a divergence may occur between the Statistics Canada faculty data and the three discipline groups under which Chairs are allocated, an examination of the nominations for Chairs received to date indicated that the Statistics Canada data still appear to be a reasonable proxy (See Annex 3, Tables 3-3 and 3-4); furthermore, they are the only data available.

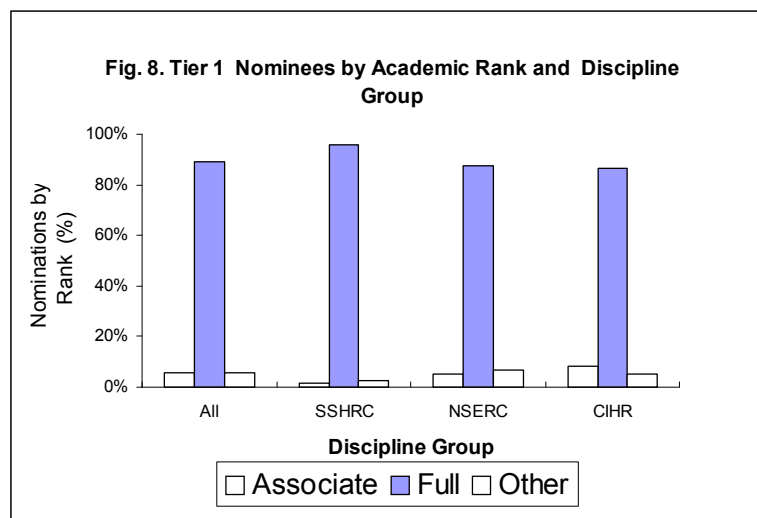
¹¹ In this document, the term CIHR is used to represent both MRC and CIHR.

Results



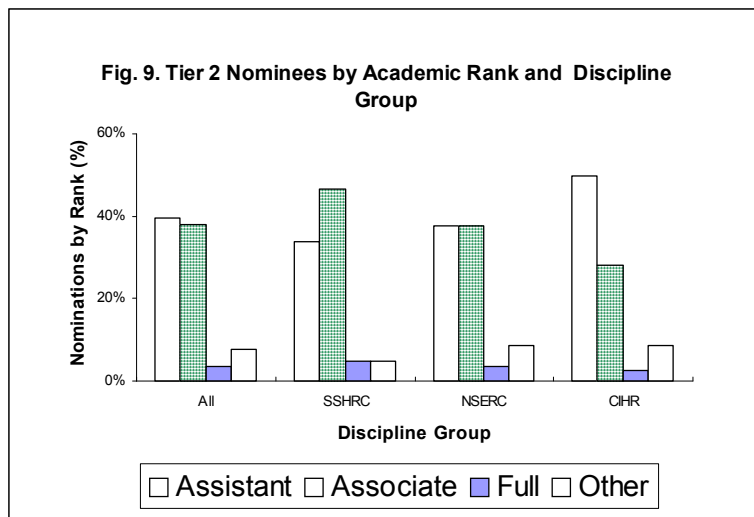
The results concerning nominations are based on the the first eight cycles, while the results concerning the attribution of Chairs are based on the first seven cycles.¹²

As can be seen in **Fig. 7**, for Tier 1 Chairs, the proportion of women nominated was slightly lower overall than the proportion of female faculty at the full professor level (compare first two bars under “All”). This is due mainly to a discrepancy in the CIHR disciplines, where the proportion of female nominees was only 66% of the proportion of women at the full professor level (compare the first two bars under “CIHR”). By contrast, the proportion of female nominees for Tier 1 Chairs in the SSHRC and NSERC groups was similar to their proportion at the full professor level. The working assumption was that the majority of Tier 1 Chair nominees are at the full professor level. This is borne out by the analysis (**Fig. 8**) of Tier 1 Chair nominations, which shows that more than 90% of all nominees were full professors at the time of nomination.¹³



¹² There were two cycles in 2000: 2000-1 and 2000-2, four cycles in 2001: 2001-1, 2001-2, 2001-3 and 2001-4. So far, there have been nominations for two cycle in 2002: 2002-1, for which the selection is complete and 2002-2, for which only nomination data are available.

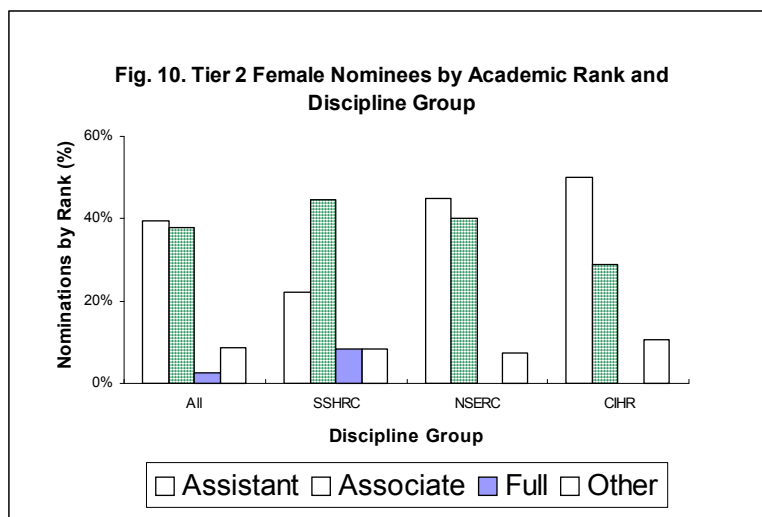
¹³ The group “other” represents “external” nominees for whom the eventual academic rank is not known.



For Tier 2 Chairs, (**Fig. 7**) the proportion of women nominated was lower overall and in the SSHRC and CIHR disciplines than their proportion among the assistant (At) and associate (Ac) professor ranks. In the NSERC disciplines taken together, the proportion of female nominees was similar to their proportion among faculty.

The working assumption, based on the eligibility criteria, was that nominees for Tier 2 Chairs were

mostly at the associate and assistant professor levels. This is confirmed by the data (**Fig. 9**). In the SSHRC disciplines, 39% of Tier 2 nominees were assistant professors and 56% associate professors. In the NSERC discipline groups, 40% were assistant professors and 44% associate professors. In the CIHR group, 52% were assistant professors and 36% associate professors.¹⁴

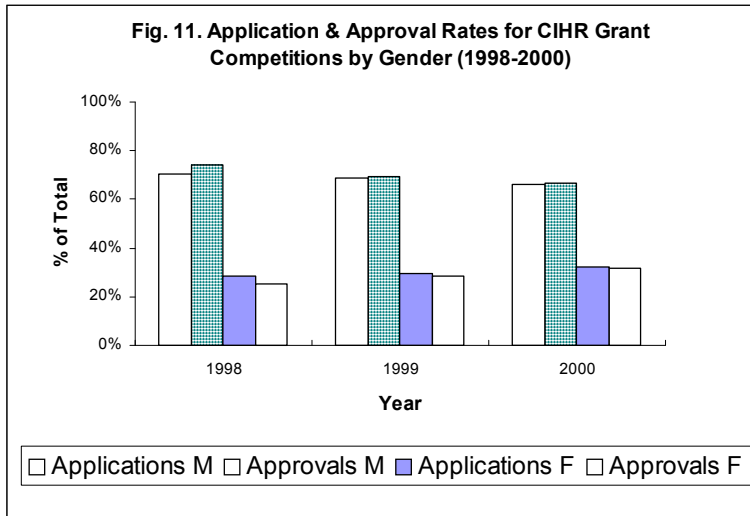


The question arose whether the women nominated for Tier 2 Chairs were more experienced than the men. That is, are they more likely to be recruited from the higher ranks where they are not as numerous? The data in **Fig. 10** show that this is the case for the SSHRC group, where 22% of nominees were at the assistant professor level, whereas 44% were associate professors and 8% full professor. As a group,

therefore, female nominees in the SSHRC group held a higher academic rank than their male counterpart. For the NSERC and CIHR groups, the proportion of female nominees in each rank was similar to that observed for both genders together (compare NSERC and CIHR groups in Fig. 9 and 10). It should also be noted that there were no female Tier 2 nominees at the rank of full professor in the NSERC and CIHR groups (note the absence of the third bar in both of these groups).

¹⁴ Note that postdoctoral fellows nominated for Chair positions were ascribed to the assistant professor level.

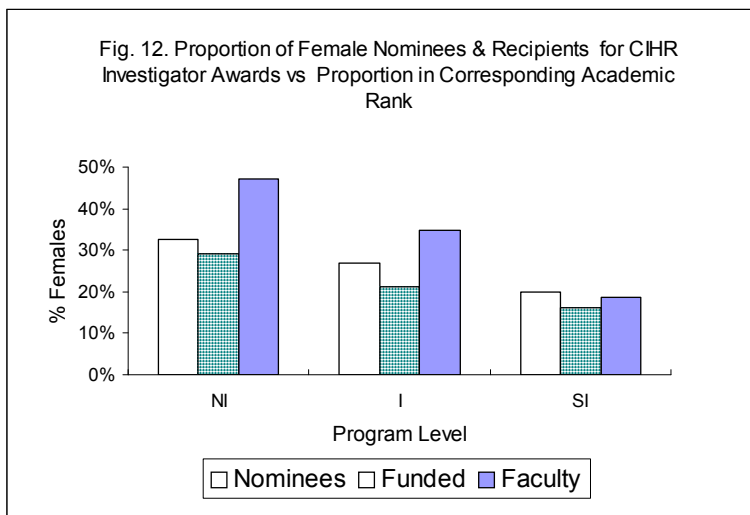
Table 3-2 in Annex 3 provides detailed information on the numbers and proportion of female and male nominees at each academic rank and for each Tier.



To try to understand why the overall number of female nominees for Chairs was lower than their average proportion among faculty, I used the application and approval rates by gender in the granting agencies' competitions as a proxy to establish whether women are as successful researchers as men. At least in the NSERC and CIHR disciplines, the profile of Chair nominees includes evidence of success in national, peer-

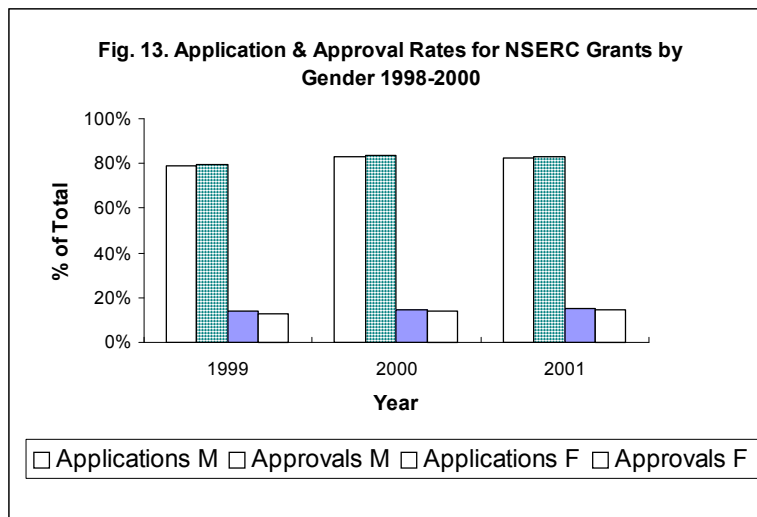
reviewed grant competition. This indicator is less sensitive in the SSHRC disciplines, since it is possible to be an active and distinguished researcher without continuing support from SSHRC.

The data in **Fig. 11** show that 30% of applicants for CIHR grants and 29% of the grantees were female. This compares well with the fact that 33% of faculty (all ranks, 1999 data) in the CIHR area are female. By contrast, out of the 314 persons nominated for Chairs in the CIHR area (both Tiers) 55 (17.5%) were female.



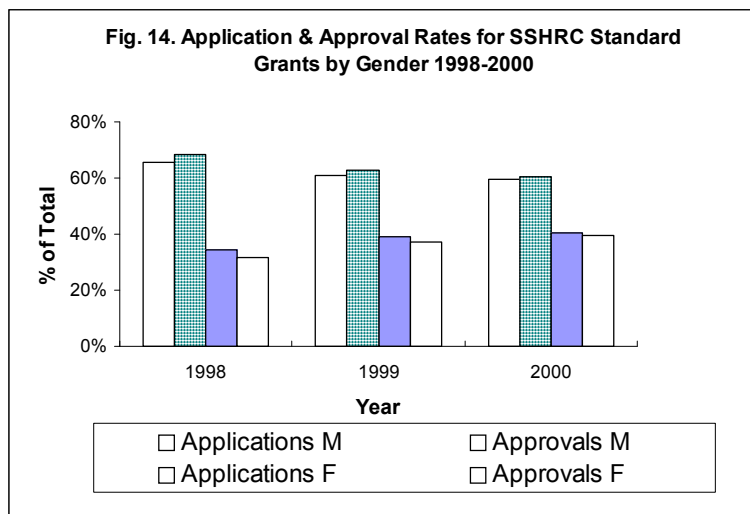
Similarly, and by contrast to their success in grant competitions, females applicants for CIHR career awards (**Fig. 12**) are less numerous than their complement within the faculty ranks. Thus 32% and 27% of the nominees for the New Investigator (NI) and Investigator (I) programs were women compared to 47% and 35% women at the assistant and associate professor levels, to which these programs

correspond fairly closely. Their success rate was commensurate with, albeit somewhat lower than, their application rates. The numbers of nominations at the Senior Investigator (SI) level (20%) were similar to the proportion of women at the full professor rank (19%). The process leading to applications for CIHR Career Awards is similar to that used for the Canada Research Chairs in that it requires a nomination from the institution's executive head.



Data obtained from NSERC (**Fig. 13**) also show that the success of women in grants competition is commensurate with their proportion as applicants (ca 14%) and slightly higher than their proportion (13.4%) among the academic ranks. Of 453 nominees for Chairs in the NSERC disciplines, 49 (10.8%) were women.

associate and full professor levels are female. The data in **Fig. 14** reveal that, in 1999, 39% of applicants for standard SSHRC grants were female and that their success rate was approximately 37%. Of 229 nominees for Chairs in the SSHRC disciplines, 58 (25.3%) were women.



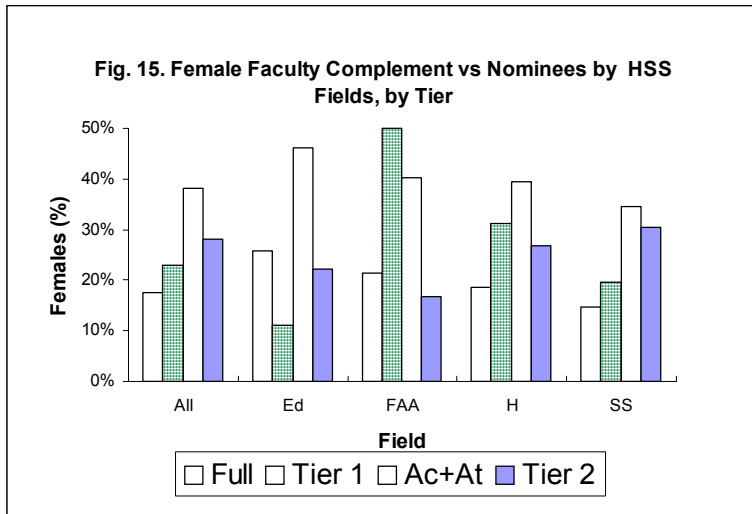
In SSHRC areas, 32% of the faculty at the assistant, 39% of applicants for standard SSHRC grants were female and that their success rate was approximately 37%. Of 229 nominees for Chairs in the SSHRC disciplines, 58 (25.3%) were women.

The data are summarized in **Table 3**. They show that the success of women in the grant competitions of the three federal granting agencies is commensurate with the rate at which they apply, which in turn is

closely related to their proportion among university faculty. However, their proportion among the Chair nominees is lower than might be expected, given their success in garnering research support. Taken together, these data suggest that while women are as successful at getting research funding, **they are less likely to be nominated for and, therefore, receive prestige awards.**

	Table 3			
	% women among			
	Faculty (all ranks)	Grant Applicants	Grant Recipients	Chair Nominees (both tiers)
SSHRC	27.6	39	37	25.3
NSERC	12.0	14	14	10.8
CIHR	30.6	30	29	17.5

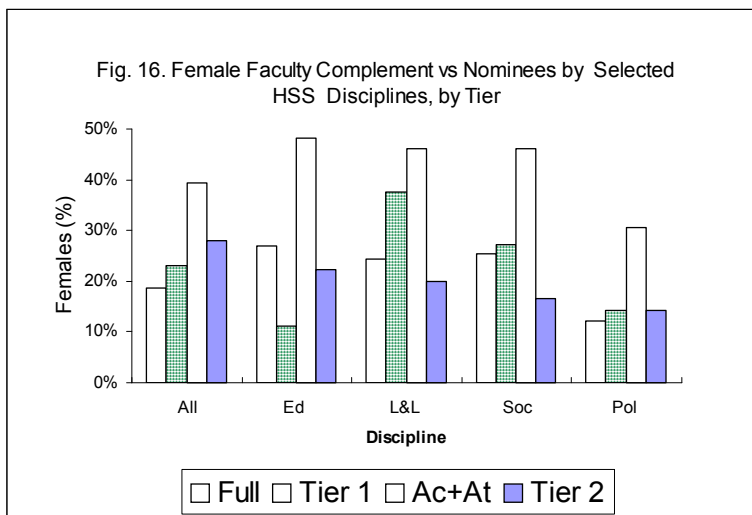
An examination of the nomination trends for each of the first eight cycles and success rates for the first seven cycles (see Annex 4) shows that the overall rate of nomination for Tier 1 Chairs (Fig. 4-1) decreased after the first cycle and has remained steady since. For Tier 2 Chairs (Fig 4-2), the overall pattern is the same, until the last two cycles where the number of nominees increased considerably. There appears to be an increase in the proportion of women nominated for Tier 1 Chairs in the last two cycles (2002) (Fig. 4-3); but there is no discernible trend in the proportions of women nominated for Tier 2 Chairs (Fig. 4-4) across the eight cycles.



The data displayed in Figures 8-10, above show that fewer women have been nominated for Tier 2 Chairs in the SSHRC group and for Tiers 1 and 2 Chairs in the CIHR group than would be warranted by their proportion among the faculty.

In the first case (SSHRC group) one of the contributing factors is likely to be the weighting of the nominees toward the associate and full professor ranks, where

women are less numerous (35 and 19 % of the faculty, respectively, vs 48% at the assistant professor level) .

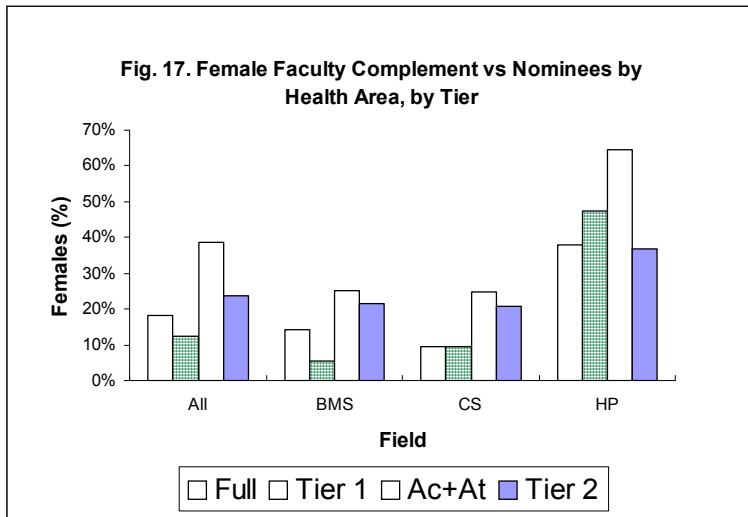


To determine whether the lower proportion of women among nominees was discipline specific, I partitioned the data among the four Statistics Canada HSS fields (see Annex 3, Table 3-3) (Fig. 15)¹⁵ and among several disciplines where women are highly represented among the faculty (Fig. 16) comparing the faculty complement with the Chairs nominations. For these calculations, Tier 1 Chair

nominees were assumed to be full professors and Tier 2, assistant and associate professors. Education (Ed) accounts for 14% of HSS Faculty; Fine and Applied Arts (FAA), for 7.5%, Humanities (H), for 28%; and Social Sciences (SS), for 50%. Faculty in Languages & Literatures (L&L) represent 12% of the total HSS faculty, while Sociology and Political Sciences represent 5 and 4%, respectively.

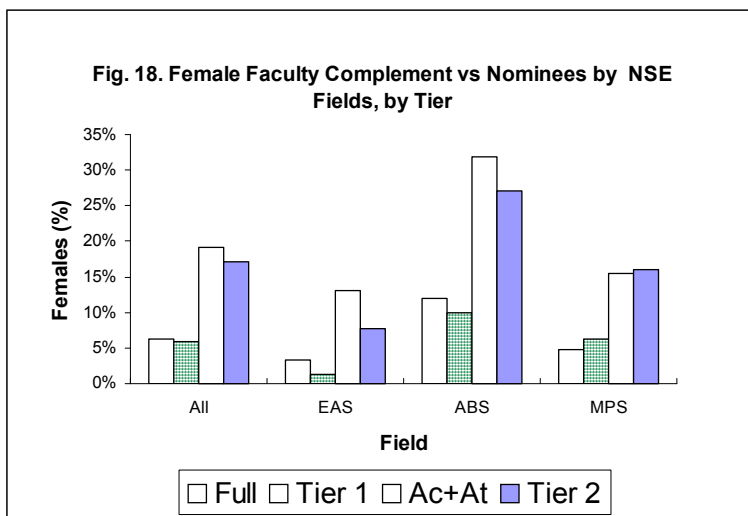
¹⁵ The 1998 faculty data were used to construct Figs. 15-18.

The data in Fig. 15 and 16 show that in each of the fields and disciplines, the proportion of female nominees for Tier 2 Chairs is less than the proportion of women among the faculty. This is also true for Education at the Tier 1 level. Further analysis would be needed to determine whether, in general, the selection of more experienced faculty as nominees for Tier 2 Chairs in the SSHRC discipline group, as noted above, is detrimental to women.



A further analysis of the Health/CIHR area (**Fig. 17**) was also done to try to understand the large discrepancy between the proportion of female Chair nominees and their proportion among faculty and grant applicants. The Statistics Canada data treat Health Professions as a single field. For the purpose of this analysis, I subdivided the Health field into three areas (see Annex 3, Table 3-3 and accompanying text for

further detail): Basic Medical Sciences (BMS) account for 13% of faculty in the Health field; Clinical Sciences (CS), for 57% and Health Professions (HP), for 30%. By contrast, BMS and CS each account for 43% of the Tier 1 Chairs in the CIHR area, with HP having 11%. In the case of Tier 2 Chairs, the distribution is as follows: BMS: 36%; CS: 55%; and HP: 13%. Female faculty are not distributed evenly among the Health areas, the highest proportion of women being in the HP group. The deficit in female Tier 1 nominations in the BMS group is one of the surprising findings of this analysis. While the deficit in Tier 2 nominations in BMS and CS appear small, they are significant, given the large proportion of Chairs in these areas.



In the Natural Sciences and Engineering (NSE) (**Fig. 18**), overall, the proportion of female Chair nominees appeared appropriate for their proportion among the faculty, although there is a small deficit in Tier 2 nominees. Among the three fields, Engineering and Applied Sciences (EAS) accounts for 29% of faculty. Although the proportion of female faculty is low in this field, the proportion of female nominees for both tiers is

considerably lower than might be expected from the female faculty complement.

Similarly in Agriculture and Biological Sciences (ABS), which accounts for 26% of faculty and where the proportion of female faculty is the highest among the NSE fields, the proportion of female nominees is somewhat smaller than could be expected from their representation among faculty. Mathematics and Physical Sciences (MPS) accounts for 45% of NSE faculty and it is the only field where the proportion of female Chair nominees equals (and even surpasses) the female faculty complement. Given the high proportion of faculty in that field, the success in recruiting Chair nominees in that field masks the deficiencies in the other two fields, when the NSERC disciplines are viewed as a whole.

To understand how universities may vary among one another in their nomination patterns, the proportion of female nominees from each university was assessed. The universities were then grouped as to their Chair allocation. The data are shown in Table 4.

Table 4. % Female among Faculty and Chair Nominees by University Grouping						
Chair Allocation→	Faculty	Chair Nominees				
		5-20 Mean	20-70 ¹⁶ Mean Median		70+ Mean Median	
Full /Tier 1	14.4	16.7	7.8	2.8	12.6	12.5
Ac+At / Tier 2	34.6	14.1	21.1	20	24.9	26.5

In the 26 universities allocated 5-20 Chairs, the proportion of female nominees for Tier 1 Chairs on average is slightly higher than the proportion of women at the Full Professor level, however the proportion of women nominated for Tier 2 Chairs lags far behind their number on the faculty.¹⁷ In this group, many institutions have not yet named more than one Chair; therefore, calculation of the median is not appropriate.

Sixteen universities have been allocated between 20 and 70 Chairs. Among these, 8 universities have nominated no women for Tier 1 Chairs (range: 0-22%), explaining the low average and the even lower median. Two out of the same 8 universities have nominated no women for Tier 2 Chairs (range: 0-40%); while the mean and the median for the group correspond fairly closely, the mean is considerably lower than the proportion of women among the corresponding faculty group.

Among the nine universities allocated more than 70 Chairs, all have nominated women for both Tiers. For both Tier 1 (range 3-17%) and Tier 2 (range 10-36%) Chairs the mean and median correspond but the mean is slightly lower than the proportion of women among the faculty.

Detailed information by university is provided in Annex 5.

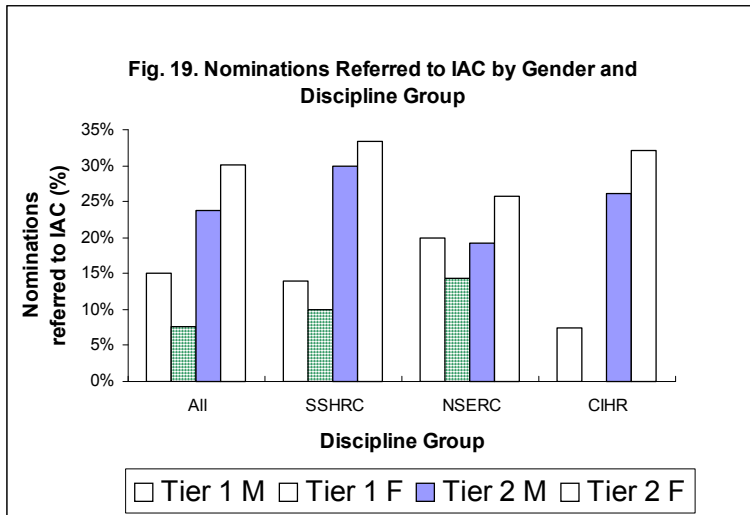
¹⁶ In fact, the universities in this group have been allocated between 20 and 57 Chairs.

¹⁷ It is not known, however, how these smaller universities compare to the average as to their female faculty complement.

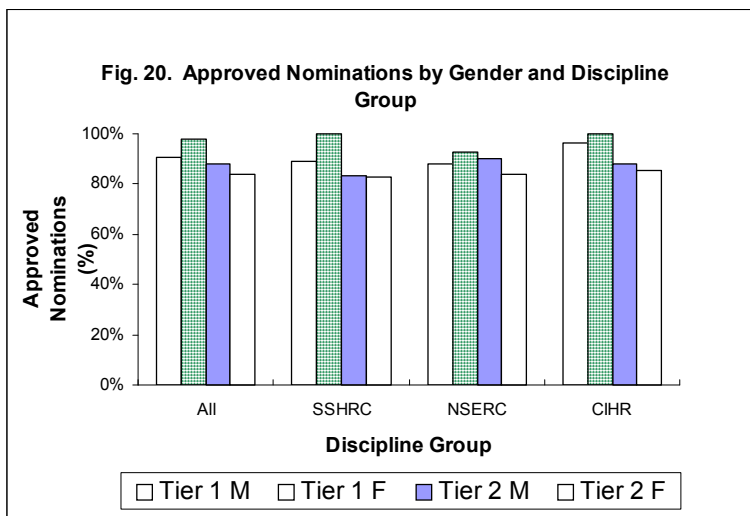
Therefore, all institutions need to continue to actively recruit and nominate women and some institutions will need to increase their efforts significantly.

Unfortunately, the information was not available to determine if there are major variations among institutions in the complement of female faculty.

Examination of the Canada Research Chairs Program success rates by gender



The process involved in the approval of nominees for Chairs include an external assessment of each nomination by selected members of the College of Reviewers; if the external evaluators are unanimous, the nomination is referred directly to the Steering Committee for approval. If the external reviewers do not agree, the nomination is referred to the Interdisciplinary Adjudication Committee (IAC) for further study.



The results in **Fig. 19** indicate that the dossiers of Tier 1 female nominees were less likely to be referred to the IAC than those of male nominees (overall 7.5% female and 15% male Tier 1 applicants were referred to the IAC). The reverse was true for Tier 2 nominees, where the dossiers of female nominees were slightly more likely to be referred to the IAC (30% for females vs 24% for males).

However, the results in **Fig. 20** show that female nominees are as successful as their male counterparts at the final approvals' step. Indeed, female nominees for Tier 1 Chairs appear to have a greater success rate than male nominees (98% vs 90%). For Tier 2 nominees, success rates are of the order of 84% for females and 88% for males, with some variations among discipline groups.

It is evident from these statistics **that, overall, the Chair selection process does not discriminate against female nominees**, as there is little difference in success rates between male and female nominees.

Identification of requirements for data

Identification of the data source, including its scope, nature and relevance to the research questions

Identification of other sources of information (quantitative and qualitative), their scope, nature and relevance to the research questions

The statistical data used in this paper were those readily available from AUCC (using Statistics Canada data)¹⁸, from the Statistics Canada¹⁹ and the Canadian Association for Graduate Studies²⁰ web sites (see Annex 6 for a list of data sources for each figure). These data could be refined further on the basis of the characteristics and profile of nominees. There is also a category (for both Tier 1 and Tier 2 Chairs) that was classified as “others,” which presumably includes external candidates to whom an academic rank has not yet been conferred. It would be useful to find out at what level these nominees are appointed, if successful.

A wealth of data exists at Statistics Canada, however, determining what might be useful requires due consideration and an in-depth knowledge of the various data sets available. To ensure that these are exploited appropriately, the Chair Secretariat should collaborate closely with AUCC to identify and extract the appropriate information.

The federal granting agencies also keep data on gender in their various competitions. It would be useful for the Chairs Secretariat to collaborate with them on a continuing basis to ensure that these data meet the needs of the Canada Research Chairs Program.

There are a number of resources to find out the availability of highly qualified personnel (HQP) in other countries. For example, the USA and the UK provide such statistics at the following sites: The NSF Science and Engineering Indicators <http://www.nsf.gov/sbe/srs/seind01/pdf/>; The USA Digest of Educational Statistics <http://www.nces.ed.gov/>; The Higher Education Statistics Agency of the United Kingdom <http://www.hesa.ac.uk/holisdocs>.

To improve the quality of the data as the program unfolds and to capture information related to other equity issues, the Chairs Secretariat might consider preparing a self-identification questionnaire with well-defined questions to ensure that the data it gathers on Chair holders are enriched. If possible, similar information should also be collected on the unsuccessful nominees, although it is recognized that they are particular challenges that apply to that category: there would be little incentive for these persons to participate and there might be some difficulties related to equity, should these persons be eligible to be nominated again. However, given that the success rates of

¹⁸ <http://www.aucc.ca/en/acuindex.html>

¹⁹ <http://www.statcan.ca/english/Pgdb/People/Education/educ03a.htm>

²⁰ <http://www.uottawa.ca/associations/cags-aces/English/CAGSFrameE.htm>

nominees for Canada Research Chairs are very high, the exclusion of unsuccessful nominees from such a survey would probably not constitute a major defect.

Identification of groups of key stakeholders (e.g. university presidents and other university officials) as well as a preliminary list of key individuals, who could eventually be interviewed regarding gender issues, in the context of the ongoing evaluation of the Program.

Essentially gender and other equity issues, as related to the Chairs program, need to be promoted to as large a group of stakeholders as possible. Given the fact that nominations for Chairs come from departments and faculties through to the person(s) responsible for coordinating nominations at the institutional level, these issues need to be uppermost in the minds of the recruiters and nominators: department chairs (or equivalent), selection committee members at the departmental and faculty levels, and faculty deans as well as in the minds of the persons responsible for the program at the institutional level (president, vice-president academic and/or research), and the members of the institutional selection committee.

On the basis of particular successes, the Chairs Secretariat should continue to identify and disseminate best practices used in the recruitment and nomination of candidates for Chairs. In this context, the Best Practices Workshop held in June 2002²¹ should be helpful. However, given that the Chairs Program is a permanent one, efforts from all concerned must be sustained.

²¹ <http://www.chairs.gc.ca/english/Program/guide/workshop.htm> or <http://www.chairs.gc.ca/english/Program/guide/WorkshopSummary.pdf>

Acknowledgments

In addition to members of the Chairs Secretariat, the following persons provided data or discussed issues:

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Heather Munroe-Blum and Judith Chadwick, University of Toronto

Stuart Price, McGill University

Annex 1. Eligibility of Nominees for Chairs²²

Universities may nominate any individual who meets the qualifications required for academic staff appointments; this includes individuals who already hold an academic position at the university. University and/or provincial policies will apply with respect to employment equity and age restrictions.

- Nominees for Tier 1 positions must be full professors or associate professors who are expected to be promoted to the full professor level within one or two years of the nomination. Alternatively, if they come from outside the academic sector, nominees must possess the necessary qualifications to be appointed at these levels.
- Nominees for Tier 2 positions are intended to be emerging scholars. They must be assistant or associate professors, or possess the necessary qualifications to be appointed at these levels. In other words, they may range from recent Ph.D. graduates to associate professors. Under some circumstances a full professor can be nominated for a Tier 2 Chair. Universities are asked to provide justification for a nominee who is more than 10 years from the Ph.D. at time of nomination.

²² Excerpt from the CRC Program Guide

Annex 2. Data used to construct Figure 4.

		% Female Faculty by Discipline Group, by Year								
		<u>1977</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
All Fields	Total	30,283	31,099	34,199	36,428	36,167	34,767	33,702	33,665	33,801
	Females	4,304	4,534	5,612	7,122	8,539	8,465	8,565	8,804	9,155
	%F	14.2	14.6	16.4	19.6	23.6	24.3	25.4	26.2	27.1
SSHRC	Total	17235	17225	18735	19827	19657	18717	18064	17952	17,965
	Females	2812	2888	3586	4595	5475	5390	5422	5554	5,783
	%F	16.3	16.8	19.1	23.2	27.9	28.8	30.0	30.9	32.2
NSERC	Total	8541	8661	9560	10304	10217	9876	9526	9487	9,628
	Females	519	537	663	886	1173	1173	1198	1232	1,291
	%F	6.1	6.2	6.9	8.6	11.5	11.9	12.6	13.0	13.4
CIHR	Total	4,231	4,824	5,651	6,018	6,072	5,923	5,850	5,987	5,861
	Females	950	1,069	1,302	1,561	1,815	1,816	1,853	1,927	1,945
	%F	22.5	22.2	23.0	25.9	29.9	30.7	31.7	32.2	33.2

Source: Statistics Canada

Annex 3. Characteristics of Nominees for Canada Research Chairs for the First Eight Cycles

Table 3-1 Origin of Nominees for Canada Research Chairs (%)							
		Female		Male		Total	
		#	%	#	%	#	%
Tier 1	Foreign Total	6	9.4	73	15.0	79	14.4
	University	6	9.4	61	12.6	67	12.2
	Other institution	0	0.0	12	2.5	12	2.2
	Canadian total	58	90.6	413	85.0	471	85.6
	Same university	45	70.3	361	74.3	406	73.8
	Other university	13	20.3	44	9.1	57	10.4
	Other institution	0	0.0	8	1.6	8	1.5
	<i>Total # nominated</i>	<i>64</i>		<i>486</i>		<i>550</i>	
Tier 2	Foreign Total	21	21.0	96	26.3	117	25.2
	University	18	18.0	86	23.6	104	22.4
	Other institution	3	3.0	10	2.7	13	2.8
	Canadian total	79	79.0	269	73.7	348	74.8
	Same university	61	61.0	225	61.6	286	61.5
	Other university	16	16.0	41	11.2	57	12.3
	Other institution	2	2.0	3	0.8	5	1.1
	<i>Total # nominated</i>	<i>100</i>		<i>365</i>		<i>465</i>	

Table 3-2. Academic Rank of Nominees by Gender and Discipline Group

Tier	Gender	Discipline Group	PDF	%PDF	At	%At	%PDF+At	AC	%AC	Full	% Full	Other	% Other	Total
Tier 1	F	CIHR						1	4.8%	19	90.5%	1	4.8%	21
		NSERC					0	0.0%	14	93.3%	1	6.7%	15	
		SSHRC					1	3.6%	27	96.4%		0.0%	28	
		All					2	3.1%	60	93.8%	2	3.1%	64	
M	CIHR					13	8.8%	126	85.7%	8	5.4%	147		
	NSERC					14	5.8%	212	87.2%	17	7.0%	243		
	SSHRC					1	1.1%	90	95.7%	3	3.2%	94		
	All					28	5.8%	428	88.4%	28	5.8%	484		
Both	CIHR					14	8.3%	145	86.3%	9	5.4%	168		
	NSERC					14	5.4%	226	87.6%	18	7.0%	258		
	SSHRC					2	1.6%	117	95.9%	3	2.5%	122		
	All					30	5.5%	488	89.1%	30	5.5%	548		
Tier 2	F	CIHR	3	7.9%	16	42.1%	50.0%	11	28.9%	0	0.0%	4	10.5%	38
		NSERC	3	7.5%	15	37.5%	45.0%	16	40.0%	0	0.0%	3	7.5%	40
		SSHRC		0.0%	8	22.2%	22.2%	16	44.4%	3	8.3%	3	8.3%	36
		All	6	5.3%	39	34.2%	39.5%	43	37.7%	3	2.6%	10	8.8%	114
M	CIHR	4	3.3%	57	46.3%	49.6%	34	27.6%	4	3.3%	10	8.1%	123	
	NSERC	10	4.9%	65	31.6%	36.4%	77	37.4%	9	4.4%	18	8.7%	206	
	SSHRC	2	2.4%	25	30.5%	32.9%	45	54.9%	3	3.7%	2	2.4%	82	
	All	16	3.9%	147	35.8%	39.7%	156	38.0%	16	3.9%	30	7.3%	411	
Both	CIHR	7	4.3%	73	45.3%	49.7%	45	28.0%	4	2.5%	14	8.7%	161	
	NSERC	13	5.3%	80	32.5%	37.8%	93	37.8%	9	3.7%	21	8.5%	246	
	SSHRC	2	1.9%	33	32.0%	34.0%	48	46.6%	5	4.9%	5	4.9%	103	
	All	22	4.2%	186	35.4%	39.6%	199	37.9%	19	3.6%	40	7.6%	525	

Source: Chairs Secretariat Database

Table 3-3 Distribution of Statistics Canada Fields

Humanities and Social Sciences (HSS)

FIELD: Humanities (H)	FIELD: Fine and Applied Arts (FAA)	FIELD: Social Sciences (SS)
Classics	Fine Arts	Anthropology
English Language / Literature	Music	Archaeology
French Language / Literature	Other Performing Arts	Canadian Studies
History	Applied Arts	Other Area Studies
Journalism	Other Fine and Applied Arts	Commerce
Other Languages / Literatures		Criminology
Library Science		Administration Studies
Other Records Science	FIELD: Education (Ed)	Demography
Linguistics	Elementary/Secondary Teacher Trng	Economics
Other Mass Communication	Higher Educ./Post-Sec. Teacher Trng	Geography
Philosophy	Kindergarten/Pre-School Teacher Trng	Law and Jurisprudence
Religious Study	Non-Teaching Field	Man/Environment Studies
Theological Studies	Kinesiology	Political Science
Translation and Interpretation	Recreation	Psychology
Other Humanities	Other Education	Social Work and Social Welfare
		Sociology
		Military Studies
		Other Social Services

Natural Sciences and Engineering (NSE)

FIELD: Agricultural and Biological Sciences (ABS)	FIELD: Engineering and Applied Sciences (EAS)	FIELD: Math. and Physical Sciences (MPS)
Agriculture	Architecture	Computer Science
Biochemistry	Aeronautical and Aerospace Engineering	Mathematics
Biology	Chemical Engineering	Chemistry
Biophysics	Civil Engineering	Geology and Related
Botany	Design	Metallurgy
Fisheries and Wildlife Management	Electrical Engineering	Meteorology
Household Science and Related	Industrial Engineering	Oceanography and Water
Veterinary Medicine	Mining Engineering	Physics
Veterinary Sciences	Mechanical Engineering	Other MPS
Veterinary Medicine Specialties	Metallurgical Engineering	Not Reported
Zoology	Other Engineering	
Toxicology	Engineering Science	
	Engineering General	
	Forestry	
	Landscape Architecture	

Table 3-3 Distribution of Statistics Canada Fields

FIELD: Health Professions²³		
Area: Basic Medical Sciences (BMS)	Area: Clinical Sciences (CS)	Area: Health Professions (HP)
Include Biochemistry, Genetics, Microbiology, Physiology, Pharmacology, Molecular and Cell Biology carried out in the context of health issues.	Dentistry Dental Specialties Medicine Medical Specialties Surgical Specialties	Epidemiology and Public Health Nursing Other Health Professions Rehabilitation Medicine Optometry Paraclinical Sciences Pharmacy

The above Table shows that there are some discrepancies between the Statistics Canada Fields and the Chairs Discipline Groups. For example, Psychology is attributed entirely to the HSS Field. Furthermore, the subfields listed for Health Professions do not appropriately represent the current developments of research in health.

The broad mandate of CIHR presents another area of complexity. CIHR grantees and Chairs in the CIHR discipline group are no longer restricted to the traditional areas encompassed by the Statistics Canada “Health Professions” Field, but cover the gamut from philosophy to engineering and physics. Furthermore, faculty in many of the subfields listed under the Agricultural and Biological Sciences (such as veterinary sciences) are eligible for CIHR awards and Chairs.

To find out whether the discrepancies between the Statistics Canada Fields and the Chairs Discipline Groups were likely to distort the faculty data, the “primary discipline” identified by nominees as listed in the Chairs database was reinterpreted in terms of the Statistics Canada “Fields” listed in Table 3-3. When necessary, the secondary discipline and the areas of application listed by each candidate were used to refine the classification. The database was then sorted to find out the distribution of Chairs among the three Chairs Discipline Groups, SSHRC, NSERC and CIHR. For example, all those showing Psychology as a primary discipline were categorized as Humanities and Social Sciences (HSS) in the first instance and then separated into the Chair discipline group in which they had been nominated. A total of 27 Chair nominees indicated Psychology as their primary discipline, 12 of them were nominated for SSHRC Chairs, 12 for NSERC Chairs and 3 for CIHR Chairs.

It appears from the data shown in **Table 3-4** below that, at least until now, the discrepancies between the two types of categories are fairly small: more than 90% of nominees falling in the same categories for both the Statistics Canada data and the relevant Chairs discipline group for Tier 1 Chairs. For Tier 2 Chairs in the CIHR discipline group, there is more diversity, however, nearly 84% of the nominees were appropriately categorized. It is expected, however, that the discrepancies will increase as time goes on.

²³ The groupings below are those of the author, see text for details.

Table 3-4. % Distribution of Nominees by Statistics Canada "Fields" Among Each Discipline Group						
	"Field"	ABS	NSE EAS	MPS	HSS	HEALTH
	<i>Discipline Group</i>					
Tier 1	<i>CIHR</i>		1.3	0.6	3.8	95.6
	<i>NSERC</i>	22.1	29.5	43.4	5.0	
	<i>SSHRC</i>		0.8		98.4	0.9
Tier 2	<i>CIHR</i>		1.4	5.6	9.1	83.9
	<i>NSERC</i>	21.9	31.0	38.6	3.8	4.8
	<i>SSHRC</i>		1.9	2.8	94.4	0.9
Full names for the categories are given in Table 3.3, above						

For the analyses involving sub-fields (e.g. Figs. 2 and 17) the subareas listed in Statistics Canada Health Profession Field were regrouped as indicated in Table 3-3, above. In some cases, the classification was arbitrary as it could be difficult to distinguish between the BMS and CS groups. The decision was taken to include various health professions (other than medicine and dentistry) together with Epidemiology and Public Health in the HP sub-group, as the nominees originating from health professions (such as Nursing, Rehabilitation) listed Population Health, Health Services Research or Multidisciplinary Health Research as their primary discipline.

Annex 4. Trends in Nomination and Success

Figures 4-1 and 4-2 show the number of nominations and approvals for Canada Research Chairs by cycle for Tier 1 and Tier 2, respectively. They show that after the first cycle, the number of nominations has remained fairly steady for Tier 1 Chairs. For Tier 2 Chairs, the last two cycles have seen an increase in the number of nominations comparable to the numbers in the first cycle.

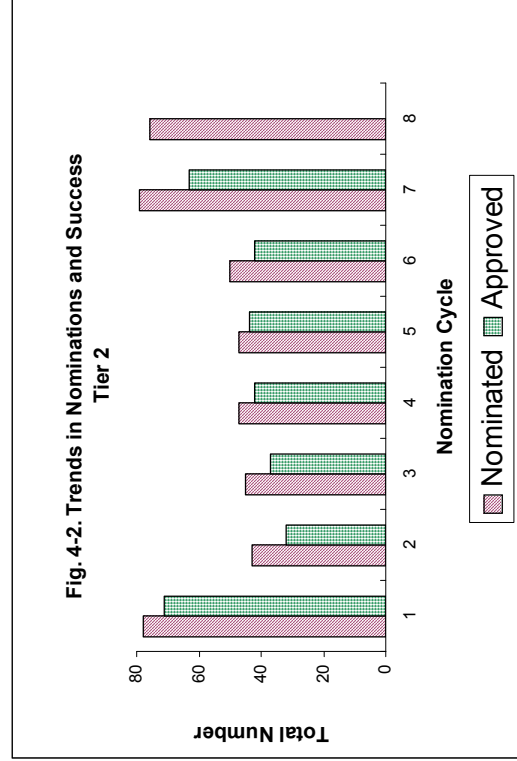
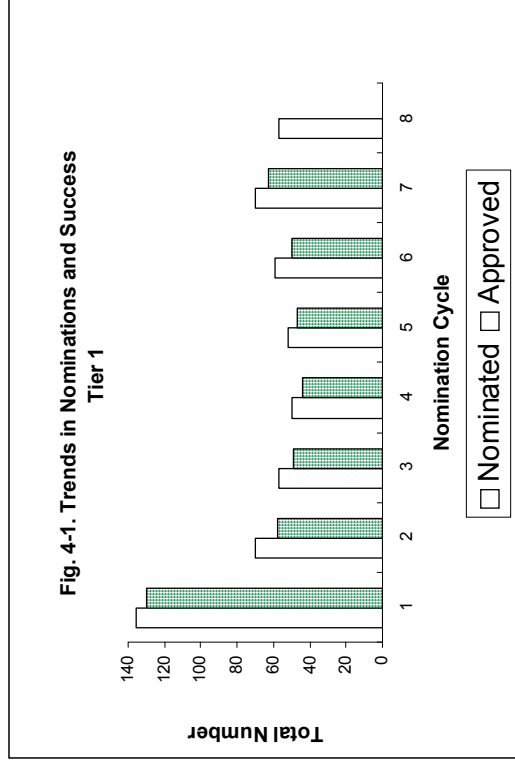
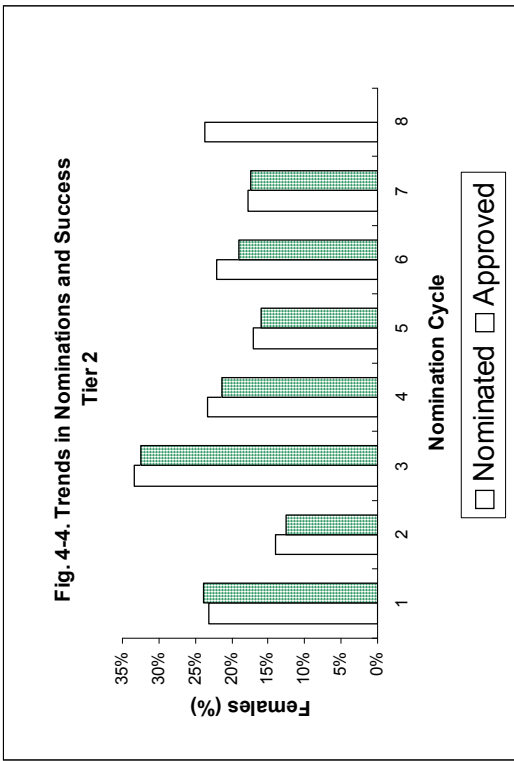
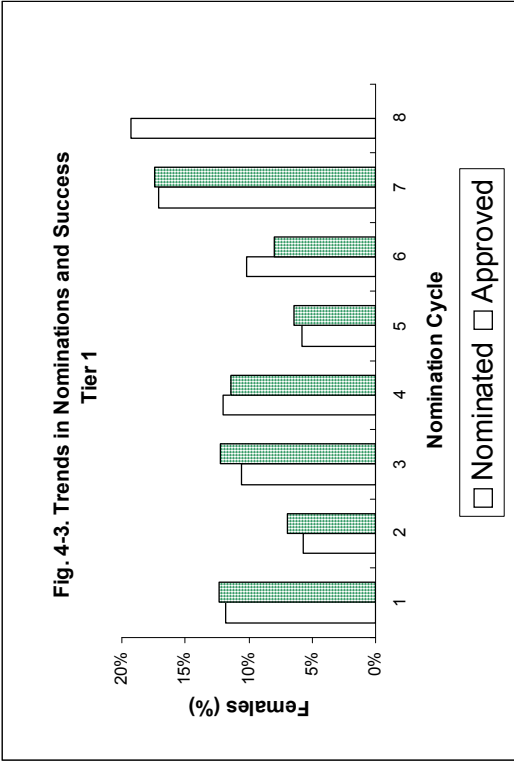


Fig. 4-3 and 4-3 show the proportion of women nominees and recipients of Chairs, by cycle. It appears that the proportion of female Tier 1 nominees increased in Cycles 7 & 8 while the nomination of female for Tier 2 Chairs shows no particular trend.



Annex 5. Nomination of Women for Canada Research Chairs

The following Table provides the comparative data on the nomination of female and male candidates for Canada Research Chairs. The column entitled "Allocation" represents the current chair allocation for the institution.

University	Tier 1			Tier 2			Allocation		
	F	M	Total	%F	F	M		T	%F
McGill University	1	28	29	3.4%	9	16	25	36.0%	167
McMaster University	2	23	25	8.0%	3	13	16	18.8%	73
Université de Montréal	5	29	34	14.7%	2	18	20	10.0%	117
Université Laval	4	28	32	12.5%	6	13	19	31.6%	97
University of Alberta	5	30	35	14.3%	6	27	33	18.2%	129
University of British Columbia	6	43	49	12.2%	10	34	44	22.7%	156
University of Calgary	2	15	17	11.8%	6	11	17	35.3%	72
University of Toronto	11	55	66	16.7%	18	50	68	26.5%	267
University of Western Ontario	3	20	23	13.0%	4	11	15	26.7%	73
Carleton University		8	8	0.0%	1	5	6	16.7%	25
Concordia University		2	2	0.0%		2	2	0.0%	22
Dalhousie University		10	10	0.0%	4	6	10	40.0%	46
École Polytechnique de Montréal		9	9	0.0%		7	7	0.0%	23
Memorial University of Newfoundland	2	7	9	22.2%	1	4	5	20.0%	22
Queen's University	3	11	14	21.4%	3	7	10	30.0%	57
Simon Fraser University		9	9	0.0%	1	8	9	11.1%	39
Université de Sherbrooke	1	12	13	7.7%	2	5	7	28.6%	36
Université du Québec à Montréal	1	11	12	8.3%	2	5	7	28.6%	29
University of Guelph		12	12	0.0%	2	6	8	25.0%	35
University of Manitoba	1	17	18	5.6%	2	8	10	20.0%	51
University of Ottawa	3	16	19	15.8%	2	5	7	28.6%	56
University of Saskatchewan		8	8	0.0%	1	6	7	14.3%	32
University of Victoria	2	12	14	14.3%	1	9	10	10.0%	34
University of Waterloo		13	13	0.0%	2	11	13	15.4%	52
York University	1	9	10	10.0%	4	11	15	26.7%	32

University	Tier 1			Tier 2					Allocation
	F	M	Total	%F	F	M	T	%F	
Acadia University		1	1	0.0%		3	3	0.0%	6
Brock University		1	1	0.0%		3	3	0.0%	8
Ecole des Hautes Études Commerciales		1	1	0.0%		1	1	0.0%	6
Lakehead University	1		1	100.0%	1	3	4	25.0%	6
Laurentian University		2	2	0.0%	2		2	100.0%	10
Mount Allison University					4	4	4	0.0%	5
Ryerson University		1	1	0.0%		2	2	0.0%	8
St. Francis Xavier University					2	2	2	0.0%	7
St. Mary's University		1	1	0.0%		3	3	0.0%	6
Trent University		2	2	0.0%		5	5	0.0%	8
Université de Moncton		1	1	0.0%		3	3	0.0%	6
Université du Québec à Chicoutimi	1	4	5	20.0%	1	1	2	50.0%	8
Université du Québec à Rimouski		2	2	0.0%		2	2	0.0%	6
Université du Québec à Trois-Rivières		4	4	0.0%		2	2	0.0%	11
Université du Québec École de technologie supérieure		3	3	0.0%		1	1	0.0%	6
Université du Québec en Outaouais		2	2	0.0%		2	2	0.0%	6
Université du Québec Institut national de la recherche scientifique		6	6	0.0%		3	3	0.0%	18
Université du Québec Télé-université	1	1	2	50.0%	1		1	100.0%	5
University of Lethbridge		1	1	0.0%	1		1	100.0%	8
University of New Brunswick	1	5	6	16.7%		6	6	0.0%	16
University of Northern British Columbia					3	3	3	0.0%	6
University of Prince Edward Island		1	1	0.0%		2	2	0.0%	5
University of Regina	1	2	3	33.3%					11
University of Windsor	2	2	4	50.0%	2	5	7	28.6%	15
University of Winnipeg	2	1	1	0.0%		1	1	0.0%	6
Wilfrid Laurier University		2	4	50.0%	1	1	2	50.0%	7

Annex 6. Data Sources for Figures

Figures 1 & 2:	Canadian Association for Graduate Studies from Statistics Canada data
Figures 3-6	AUCC, from Statistics Canada data
Figure 7, 15-18	AUCC and Canada Research Chairs Secretariat database
Figures 8-10, 19,20, 4-1 to 4-4	Canada Research Chairs Secretariat database
Figure 11	Canadian Institutes of Health Research
Figure 12	Canadian Institutes of Health Research and AUCC from Statistics Canada data
Figure 13	Natural Sciences and Engineering Research Council
Figure 14	Social Sciences and Humanities Research Council