# An Assessment of the Working Climate for Science Faculty at the University of British Columbia (UBC) - December 2007 

## - FULL REPORT -

Table of Contents
Procedures for the Assessment of the Working Climate for Science Faculty ..... 5
Abbreviations used in report ..... 6
Participants in the Assessment of the Working Climate. ..... 6
Statistical Analyses ..... 7
Confidentiality ..... 7

1. RESOURCES: ACCESS AND ALLOCATION .....  8
1.1 Faculty Views ..... 8
1.2 Departmental formulae ..... 13
2. TENURE, PROMOTION AND LEADERSHIP ..... 14
2.1 Tenure /Promotion in the FoS and at UBC ..... 14
2.2 Tenure/Promotion Policies and Procedures ..... 16
2.3 Leadership at UBC ..... 20
2.4 Awards ..... 24
3. HIRING ..... 26
3.1 Hiring Policies and Procedures ..... 26
3.2 Hiring Trends ..... 28
3.3 Hiring Policies, Challenges and Strategies ..... 32
3.4 Input from Focus Groups ..... 34
4. SALARY AND RETENTION ..... 35
4.1 Salary ..... 35
4.2 Retention ..... 36
5. DEPARTMENTAL CLIMATE, DISCRIMINATION AND HARRASSMENT ..... 38
5.1 Departmental Climate ..... 38
5.2 Discrimination. ..... 44
5.3 Harassment ..... 47
6. TEACHING AND MENTORING ..... 49
6.1 Teaching Loads ..... 49
6.2 Teaching Leaves ..... 52
6.3 Mentoring ..... 53
7. BALANCE OF WORK AND PERSONAL LIFE. ..... 59
7.1 Childcare and family Leave ..... 59
7.2 Partner Employment ..... 64
Appendix ..... 67

## Tables and Figures

Tables:
Table 1: Numbers of faculty members in senior administration position: 1995-2005 ..... 23
Table 2: Numbers of CIAR, CIHR and NSERC grant winners and the percentages of total recipients (2004/2005) ..... 24
Table 3: Comparisons between new female hires and female faculty: Periods of 1995-1999 and 2000-2005 ..... 32
Table 4: Numbers of UFA advertisement posted from 2000 to 2004 ..... 33
Table 5: Average salaries for male and female faculty members as a percentage of the average salaries of their departmental group and rank for 2004 ..... 36
Table 6: Reported numbers of individuals mentored by faculty members ..... 49
Table 7: Number of faculty members granted teaching release ..... 51
Table 8: Number of respondents reporting the length of the most recent maternity/parental leave ..... 61
Figures:
Figure 1: Perceived access to departmental support. .....  8
Figure 2: Perceived access to departmental support: By departmental grouping ..... 9
Figure 3: Perceived access to departmental support: By years from PhD ..... 9
Figure 4: Perceptions of fairness in allocating departmental resources .....  9
Figure 5: Perceived fairness in resource allocation: Gender differences ..... 10
Figure 6: Perceived fairness in resource allocation: By departmental grouping ..... 11
Figure 7: Perceived satisfaction with offices and labs ..... 12
Figure 8: Satisfaction with offices and labs: By departmental grouping ..... 13
Figure 9: Promotion of UBC faculty: Combined 1992-1996 cohort. ..... 15
Figure 10: Promotion of FoS faculty: Combined 1992-1996 cohort ..... 16
Figure 11: Perceptions of tenure/promotion policies ..... 17
Figure 12: Perceived clarity of tenure and promotion policies: Gender differences ..... 17
Figure 13: Perception of tenure/promotion policies: Rank differences. ..... 18
Figure 14: Affiliation of the mentor recommending for given responsibilities ..... 20
Figure 15: Affiliation of the mentor: Rank differences ..... 21
Figure 16: Capacities for leadership as a percentage of respondents having held a leadership position ..... 22
Figure 17: Perceived amount of time spent on career-benefiting committees: Gender differences ..... 22
Figure 18: Perceived amount of time spent on non-career-benefiting committees: Rank differences ..... 23
Figure 19: Percentage of female faculty by rank: 1995-2005 ..... 23
Figure 20: Numbers of award winners by gender: 1996-2006 ..... 24
Figure 21: Affiliation of the mentor recommending for awards: Gender differences ..... 25
Figure 22: Affiliation of the mentor recommending for awards: Rank differences ..... 26
Figure 23: Perceived clarity of recruitment and hiring policies ..... 26
Figure 24: Perceived clarity of recruitment and hiring policies: Gender differences ..... 27
Figure 25: Perceptions that hiring and search policies serve to increase diversity: By departmental grouping. ..... 27
Figure 26: Perception that hiring and search policies served to increase diversity: Gender difference ..... 28
Figure 27: Perception of efforts made to recruit female faculty: Gender difference ..... 28
Figure 28: Numbers of earned graduate degrees in Science in Canada: 1992-2003 ..... 29
Figure 29: Percentages of female graduate student enrolment at FoS: 1996 to 2005 ..... 29
Figure 30: Proportions of female post-docs and research associates at FoS by departmental grouping: 1995-2005 ..... 30
Figure 31: Percentages of new hires by gender: 1995-2005 ..... 31
Figure 32: Total faculty by gender: 1995-2005. ..... 32
Figure 33: Perceptions of salary compared to peers: Group differences. ..... 35
Figure 34: Average salaries by gender and years from PhD in 2004/2005 ..... 36
Figure 35: Received retention funding: 1998-2005 ..... 37
Figure 36: Having sought outside position: Rank difference ..... 37
Figure 37: Perceptions of departmental climate ..... 38
Figure 38: Perceptions of departmental climate by departmental grouping ..... 39
Figure 39: Perceptions of departmental climate: Gender difference ..... 40
Figure 40: Perceptions of departmental policies/procedures ..... 40
Figure 41: Perceptions of fair treatment by colleagues and fairness in distributing administration loads: Differences in departmental groupings ..... 41
Figure 42: Perception that sabbatical leaves are handled fairly: Rank difference ..... 41
Figure 43: Perceptions on expectations: Gender differences ..... 42
Figure 44: Perception that diversity is often addressed in departmental reviews: Group differences ..... 42
Figure 45: Perceived "no discrimination" in job-related areas: Gender difference ..... 44
Figure 46: Percentages of respondents perceiving job-related discrimination on the basis of ethnicity, gender and age ..... 45
Figure 47: Perceived basis for job-related discrimination: Gender differences ..... 45
Figure 48: Rank differences in resources-related discrimination ..... 46
Figure 49: Bases for resources- and hiring-related discrimination: By departmental grouping ..... 46
Figure 50: Perceptions of cases of harassment ..... 47
Figure 51: Perception that cases of harassment are rarely experienced: By departmental grouping. ..... 48
Figure 52: Perception that cases of harassment are rarely reported: Rank differences ..... 48
Figure 53: Reported experiences of harassment ..... 49
Figure 54: Average number of individuals mentored by faculty members: Rank differences ..... 50
Figure 55: Perceived reasonable teaching loads and fairness in distribution: By departmental grouping ..... 50
Figure 56: Mentoring load compared to peers ..... 53
Figure 57: Perceived informal and formal mentoring load for faculty/staff as compared to peers: By rank and by years from obtaining PhD ..... 54
Figure 58: Perceived amount of received mentoring at UBC ..... 55
Figure 59: Perceived amount of received mentoring in committee work and other administrative tasks: By departmental grouping. ..... 55
Figure 60: Perceived amount of received mentoring: Gender differences ..... 56
Figure 61: Amount of mentoring received: By years from obtaining PhD. ..... 57
Figure 62: Perception of informal and formal mentoring provided ..... 58
Figure 63: Satisfaction with informal and formal mentoring: Gender differences ..... 58
Figure 64: Impact of career consideration on decisions of having children: Group differences ..... 64
Figure 65: Perceived adequate access to childcare: Group differences ..... 61
Figure 66: Percentages of respondents taking maternity/parental leave ..... 61
Figure 67: Taking maternity/parental leave: By years from obtaining PhD ..... 62
Figure 68: Number of respondents reporting responsibilities during maternity/parental leave ..... 62
Figure 69: Perceptions of efforts on the part of the department and UBC in assisting partner employment: By years of obtaining PhD ..... 64
Figure 70: Partner employment status: Gender difference ..... 65
Figures in Appendix:
Figure 1: Total faculty, total survey respondents, and focus group participants: By gender, departmental grouping and rank ..... 66
Figure 2: Total faculty and total survey respondents by ethnicity ..... 67

## FULL REPORT ${ }^{1}$

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## Procedures for the Assessment of the Working Climate for Science Faculty

In early 2005, the Dean of the Faculty of Science, John Hepburn, with the support of the Provost and Vice President Research, established an advisory committee to assess the working climate of FoS. This Advisory Committee developed a variety of strategies to assess the working climate of the faculty. These included an on-line faculty survey, a department heads questionnaire, and collection of quantitative data from various administrative units across the campus ${ }^{3}$. Together with a Working Group ${ }^{4}$ composed of representatives from the nine departments in FoS, a survey advisor and a survey consultant, the Advisory Committee designed the surveys ${ }^{5}$.

The results were compiled by the survey consultant and report consultants ${ }^{6}$ and overseen by the Advisory Committee. Focus groups were added to provide context for the data collected and to allow for more detailed responses to faculty concerns and issues. The Advisory Committee designed the focus group questions and procedures, together with consultants ${ }^{7}$ from the UBC Equity Office, who then facilitated and led the focus groups.

[^0]
# Abbreviations used in report 

Faculty of Science= FoS

## Surveys ${ }^{8}$ :

FS = Faculty Survey
HS = Head Survey

## Comparisons of departmental groups:

LS= Life Sciences (Zoology, Botany, Microbiology/Immunology)
PS = Physical Sciences (Physics, Chemistry, Earth and Ocean Sciences)
MCS = Mathematical and Computer Sciences (Mathematics, Statistics, Computer Science)

## Participants in the Assessment of the Working Climate

An invitation and access to the on-line Faculty Survey was sent to all 360 tenured/tenuretrack full-time faculty members appointed before July, 2005 including instructors, senior instructors, assistant professors, associate professors, and full professors, and to 119 professors emeriti. Completion of the survey was on a voluntary basis. Cross-appointed faculty members were asked to complete the survey once as a member of their primary department. A total of 129 completed surveys were returned and used in the faculty survey data analysis, giving response rates of $35 \%$ (125 out of 360 ) for tenured/tenure-track, $3 \%$ (4 out of 119 ) for emeriti, and $27 \%$ overall (129 out of 479).

Of the 129 respondents, 100 (78\%) were male and 29 (22\%) were female. By rank, the tenured/tenure-track respondents were $49 \%$ full professors, $24 \%$ associate professors, $21 \%$ assistant professors, $6 \%$ instructors. To compare, the total FoS tenured/tenure-track faculty composition is, by gender, $82 \%$ male and $18 \%$ female and, by rank, $44 \%$ full professors, $25 \%$ associate professors, $21 \%$ assistant professors, and $10 \%$ instructors. Other charts summarizing the respondents by various breakdowns are included in the Appendix.

The Department Head Survey was completed separately by each of the nine Department Heads within the Faculty of Science (Botany, Chemistry, Computer Science, Earth and Ocean Sciences, Mathematics, Microbiology, Physics \& Astronomy, Statistics and Zoology). Other research institutes or labs were not included. Department Heads provided information covering faculty members appointed before July 1, 2005 only.

Complementary to the survey results, quantitative data sets were collected by the FoS Dean's Office, with the exception of the data on tenure and promotion of faculty cohorts in FoS and UBC, provided courtesy of the UBC Equity Office.

Providing faculty input complementary to the surveys, Focus Groups were run to comment on preliminary results of the Assessment and other working climate factors. Of the 44

[^1]Focus Group participants, $40 \%$ were female and $60 \%$ were male. By rank, they were $16 \%$ instructors, $16 \%$ assistant professors, $23 \%$ associate professors, and $45 \%$ full professors.

The Faculty Survey respondents were $26 \%$ LS, $36 \%$ PS, and $38 \%$ MCS, which was closely representative of the total FoS faculty ( $27 \%$ LS, $38 \%$ PS, $35 \%$ MCS). The departmental representation in the Focus Groups was $35 \%$ LS, $42 \%$ PS, and $23 \%$ MCS.

## Statistical Analyses

In addition to results based on total respondents, group differences in terms of departmental grouping, gender, rank and years from obtaining Ph. D. were investigated. Statistically significant differences for these different breakdowns were obtained by analyzing mean scores for each question. In appropriate cases, responses of "not applicable" were not included in computing the mean scores. For rank, only assistant professors, associate professors, and full professors were compared, since there were too few responses from instructor and emeriti to be included in the analysis. For gender, an additional analysis gave similar results, based on mean scores of separate gender-based response categories for each question on the Faculty survey, that is, comparing male/female responses for each possible response. This second type of analysis was not possible for comparisons among departmental groupings, ranks and groups by years from PhD since more than two subgroups were being compared for those breakdowns.

Percentages reported on survey responses correspond to all or nearly all (excluding missing data) respondents answering the question, unless indicated otherwise.

## Confidentiality

Information has been grouped in order to protect confidentiality and to ensure anonymity. The Advisory Committee and Task Force did not have access to the "raw data" from the Faculty Survey, the Department Head Survey, or the data provided by the Dean’s office, but only had access to the summary data and graphs produced by three consultants to the project in an effort to protect confidentiality.

## 1. RESOURCES: ACCESS AND ALLOCATION

Questions about resource access and allocation were included in both the Faculty Survey (FS) and the Head Survey (HS). Faculty members were asked to rate their access to six areas of departmental support (FS Q1) and perceptions of fairness for the allocation of those six resources (FS Q2) - technical support, lab equipment, lab space, clerical/administrative assistance, teaching assistants, and internal special funds. They were asked to rate the quality of their physical office and physical lab (FS Q3). Department heads were asked about departmental formulae on assignment of or access to technician support (HS Q3) and teaching assistants (HS Q4).

### 1.1 Faculty Views

When asked to rate their current access to six areas of departmental support (FS Q1), the respondents reported the least amount of support in internal special funds, with 3\% indicating "a lot of access"; they received the most support in lab space and teaching assistants, with $44 \%$ and $45 \%$ reporting "a lot of access" respectively (Figure 1).

Figure 1:
Perceived access to departmental support


A significantly higher proportion of men than women ( $40 \% \mathrm{vs} .23 \%$ ) reported "a lot of access" to technical support.

MCS respondents perceived significantly greater access to technical support than LS respondents and significantly greater access to clerical/administrative assistance than PS respondents (Figure 2).

Figure 2:
Perceived access to departmental support: By departmental grouping


Figure 3 shows that respondents with 0-6 years from obtaining PhD perceived significantly greater access to technical support than those with 7-13 years from PhD; respondents with 7-13 years from getting PhD reported significantly more access to teaching assistants than those with 14-24 years from PhD.

Figure 3:
Perceived access to departmental support: By years from obtaining PhD


When asked to rate fairness in the allocation of those six resources in their departments (FS Q2), $63 \%$ of the respondents perceived allocation of special internal funds as "somewhat fair" or "very fair." Fairness in the allocation of special internal funds was rated at the lowest of all six resources in question (Figure 4).

Figure 4:
Perceptions of fairness in allocating departmetnal resources


Male respondents perceived significantly higher levels of fairness in allocation of technical support, clerical/administrative assistance, and teaching assistants (FS Q2) than female respondents (Figure 5).
Figure 5:
Perceived fairness in resource allocation: Gender differences


MCS respondents had significantly more positive perceptions of fairness for resource allocation than PS and LS respondents (Figure 6). Their fairness ratings of allocation of technical support, lab equipment and lab space were significantly higher than LS. Their ratings of allocation of clerical/administrative assistance were significantly higher than PS. Their ratings of allocation of internal special funds were significantly higher than both PS and LS. There was no significant difference among the three groups in perception of fairness in teaching assistants allocation.

Figure 6:

## Perceived fairness in resource allocation: By departmental grouping



Those who answered "very unfair" to the six resources above were asked to explain their response. Female respondents provided three explanations: a lack of departmental support for lab equipment; no internal special funds available; and a continued practice from the past - "There are three definable groups in the Department and historically $2 / 3$ received all the resources and this has continued. $70 \%$ of the students in the department are taught by the disadvantaged group, yet no technical resources go to it."

Male respondents provided more comments. With regard to internal special funds, some commented that there were no special funds available to them. Others indicated that they were unaware of any internal special funds or that there was no information or a transparent
process regarding allocation of these funds if they were available. Still others stated that funds were allocated on an "ad hoc basis", "randomly," or "unfairly", that those who were "loudest" in the department and the "squeaky wheel" got the funds and that there appeared to be unfairness based on "politics" and "special treatment". Department politics or the "power structure" was mentioned a couple of times as factors influencing resource allocation within a department. Unfairness in space allocation was repeatedly mentioned. Other explanations that male respondents provided for their perceived unfairness included no money for clerical help, an inadequate number of TAs, technical support being tied to individual faculty, and arbitrary decisions being made on the basis of perceptions of who were "research faculty" and who were "teaching faculty".

Focus Groups also noted a perceived gender-based inequity in the way resources were allocated. The Focus Group report highlighted that non-trickle-down and non-transparent use of indirect costs (e.g. from Tri-Council grants ${ }^{9}$ ) and required administrative and infrastructure support at all levels were of great concern. Focus Group participants also recommended that the Faculty and departments develop transparent processes/policies for resource allocation and administration cost coverage, and centralize as well as streamline resource access.

When asked to rate their satisfaction with quality of their physical office, quality of their physical lab and permanence of their lab space (FS Q3), $30 \%$ and $28 \%$ of the respondents indicated "not applicable" to the questions on quality of physical lab and permanence of lab space respectively. Figure 7 shows that a majority of those respondents not indicating "not applicable" were "somewhat satisfied" (23\%) or "very satisfied"(53\%) with their quality of their offices and that, of those who had a lab, $76 \%$ and $81 \%$ were somewhat or very satisfied with quality of physical lab and permanence of lab space.
Figure 7:
Perceived satisfaction with offices and labs


[^2]There were significant differences among departmental groupings. Respondents from MCS and LS were significantly more satisfied with their physical space than those from PS (Figure 8). When asked about quality of physical lab and permanence of lab space, 51\% and $47 \%$ of the MCS respondents indicated the questions were "not applicable" to them. Among those to whom the questions were applicable, MCS respondents had a significantly more positive perception of the quality of their physical lab than PS and LS respondents (Figure 8). MCS respondents were also significantly more satisfied with permanence of their lab space than their PS counterparts.

Figure 8:
Satisfaction with offices and labs: By departmental grouping


Satisfaction with physical lab


### 1.2 Departmental formulae

Department heads were asked whether they had a departmental formula on assignment of or access to technician support (HS Q3) and teaching assistants (HS Q4) and, if so, to provide a copy of the formula.

One out of the nine departments had a departmental formula on assignment of or access to technician support per faculty member. A document outlining the details of this policy was also included. Three departments responded that this question was not applicable to them. Five departments indicated that they did not have a formula. One of these qualified the response by stating that while they did not have a formula per se, the department provided the overall infrastructure support and that each research lab was given a base level of IT support and had a single-point contact with the technical staff. Labs requiring more support were responsible for paying for and managing additional technical staff. Another department responded that assignment of technician support was mostly done through subsidized fees for service.

All but one department head reported that they had a departmental formula on the assignment of or access to TAs per course. Most formulae were based on the number of students enrolled in a course and whether the course had a lab or tutorial. The examples provided by the department heads were one TA per 30 students, one TA per 100+ students in a lecture course, one TA per 25 students ( 2 for 50 students), and one TA for an undergraduate enrollment of 60 in a course. One department reported that their formula for assigning TAs to lab courses was based on TA union formulae.

## 2. TENURE, PROMOTION AND LEADERSHIP

With respect to faculty promotion and leadership, faculty members were asked about fairness and clarity in tenure and promotion policies/procedures (FS Q29, 32.6). Faculty members were also asked about their leadership roles in their departments, at UBC and in their fields, particularly in research committees (FS Q13, 14, 15, 16). Department heads were asked about major hindrances to female faculty members’ career advancement (HS Q11) and representation on hiring committees and resource allocation committees (HS Q15, 17).

Also included in this section are administration data on faculty cohorts, leadership positions, and award recipients.

### 2.1 Tenure /Promotion in the FoS and at UBC

Comparison of promotion rates for assistant professor cohorts across all faculties at UBC and within FoS for those hired between 1992-2006 (Figures 9 and 10) suggests that there was not much difference in the overall rate of promotion to associate professors for men and women at UBC but that there was a difference in FoS rates (data from the UBC Equity). Five years after being hired, $31 \%$ of women and $33 \%$ of men in the UBC cohort were promoted to associate professors whereas $30 \%$ of women and $45 \%$ of men in the FoS cohort reached associate professor rank. Seven years after being hired, the differential increased: $40 \%$ of women and $61 \%$ of men in the FoS cohort were promoted to associate professors whereas $51 \%$ of both men and women in the UBC cohort became associate professors. When excluding those faculty members who had left UBC or FoS from the calculation, the difference widened: $43 \%$ of women and $73 \%$ of men in the FoS cohort were promoted to associate professors seven years after they were hired.

Overall, women were not promoted to full professors as quickly as men. At its worst, twelve years and fourteen after being hired by UBC, a gap of $16 \%$ existed between the numbers of men and women who had become full professors. In FoS, promotion of men to full professors came earlier than the UBC average, but women still lagged behind: by the time the first women in this cohort were promoted to full professor - ten years after being hired, $29 \%$ of the men had become full professors in the FoS. The largest gender gap occurred thirteen years after being hired: by that time, $14 \%$ of women and $46 \%$ of men in the FoS cohort were promoted to full professors.

Figure 9:
Promotion of UBC faculty: Combined 1992-2006 cohort
Promotion of UBC 1992-2006 faculty cohort: Female


Promotion of UBC 1992-2006 faculty cohort: Male


Figure 10:
Promotion of FoS faculty: Combined 1992-2006 cohort
Promotion of FoS 1992-2006 faculty cohort: Female


Promotion of FoS 1992-2006 faculty cohort: Male


Additional cohort information from the UBC Equity Office was provided for cohorts of assistant professors hired in the Faculty of Science in the years 1980/88/89/90/91. The data showed similar trends: $28 \%$ (10 out of 36) of the male faculty had been promoted to full professorships ten years after their initial data of hire, whereas over the same period none of the 9 females had become full professors.

### 2.2 Tenure/Promotion Policies and Procedures

Faculty members were asked about fairness in tenure and promotion policies/procedures in the last five years (FS Q32.6). The respondents primarily gave a positive response, with 39\% agreeing "somewhat" and 56\% agreeing "strongly" with the statement (Figure 11). When asked to tell how clear the policies and procedures for faculty tenure and promotion were in their departments (FS Q29), $50 \%$ reported "somewhat clear" and $43 \%$ indicated "very clear". The remaining $7 \%$ reported that the policies/procedures were "somewhat unclear", "very unclear" or "ad hoc" (Figure 11).

Figure 11:

## Perceptions of tenure/promotion policies



Figure 12 shows that a smaller proportion of women than men ( $38 \%$ versus $49 \%$ ) perceived that policies and procedures for faculty tenure and promotion were "very clear" (FS Q29).
Figure 12:
Perceived clarity of tenure and promotion policies: Gender differences

$\square$ Very Clear
$\square$ Somewhat clear
$\square$ Somewhat unclear

- Very unclear
- Ad hoc

In the Focus Groups, both men and women expressed dismay at the lack of clarity as to the tenure review process, with additional comments citing lack of mentors or role models negatively impacting promotion.

There were also significant differences in perceived clarity (FS Q29) and fairness (FS Q32.6) of tenure and promotion polices/procedures among respondents in terms of seniority (Figure 13). Full professors reported a significantly more positive perception of fairness in tenure and promotion policies/procedures than associate professors. In response to the statement "The tenure and promotion policies/procedures are fair", $2 \%$ of full professors indicated "somewhat disagree" whereas, $10 \%$ and $7 \%$ of associate professors "strongly" and "somewhat" disagreed with the statement. While $27 \%$ and $62 \%$ of the assistant professors reported that the policies and procedures were "very clear" and "somewhat unclear", $53 \%$ of the full professors indicated "very clear" and none reported unclear policies and procedures. Only $20 \%$ of the respondents with $0-6$ years from PhD indicated that they were "very clear" about the policies and procedures, as contrasted with $62 \%$ of the respondents with 25 or more years from PhD

Figure 13:

## Perception of tenure/promotion policies: Rank differences



Department heads were asked for their opinions regarding the major hindrances to career advancement that had disproportionately affected women faculty members in their departments over the last five years (HS Q11). Three out of the nine departments reported that women's continued role as the primary caregiver to children, parental leave and higher administrative workload for some female faculty members were found to impact female faculty more than male faculty.

Comments provided by the department heads included
(a). Women are still the primary caregiver to children, even where both spouses are working. Often women forgo traveling to conferences and other professional venues due to resulting family strain. This situation occurs to male faculty too but it has a larger effect on female faculty. One department head commented that "Both the perception and reality of having an impact in one's field is very much dependent on the myriad types of interactions one has at scientific meetings".
(b). Conflicts exist between roles of primary teacher and primary caregiver to children. If the child of a female faculty member or the faculty member herself becomes ill, there is no obvious way of delivering lectures.
(c). Making sufficient progress toward establishing a strong teaching record is more problematic for women faculty who take maternity leave, especially during the time of being an assistant professor before tenure.
(d). Assigning women faculty members to important committees whenever possible means that female faculty have a higher administrative load than many of their male counterparts.
(e). Time spent on family can impact advancement of both males and females. But since the burden of child rearing responsibility still falls on females, the burden has a disproportionate impact on them.
(f). There is a need to remain "vigilant and proactive with regard to maternity cases as they affect both female and male employees".

There was a trend in the comments provided by the department heads that more men than women chaired the promotion committees for assistant professor promotions. Three departments commented that everyone was eligible to be on the committee. The policy in one department was that roughly one third of eligible tenured associate and full professors served on the committee for three-year terms.

Department heads were asked to provide the number of persons on hiring committees and serving as chairs of these committees over the period from May 2002 to April 2005 in their department, broken down by gender (HS Q15). The results show that very few women chaired these committees over those three years. In two departments, there was one woman chairing the committees in each of the three years.

One common explanation was that most of the women faculty were junior and were not interested or qualified in taking the chair position. Other explanations included
"Full professors and senior associate professors usually chaired since they had the time and experience to devote to the work. Most women during this period were of junior status (assistant/associate professor) and were not the best candidates to chair the hiring committees."
"Committee assignments are a function of faculty choice and workload considerations."
"The department assigns faculty committee duties according to its members’ expressed choices and principles of fair workload distribution. We assign junior faculty lighter committee loads because they have larger demands on their time associated with start-up. At present, the junior ranks contain proportionally more women than the senior faculty. Thus, committees at present have a smaller proportion of women faculty than the department as a whole."
"The Head discusses potential candidates for chairing the search committees with the Head's Advisory Committee. Identification of prospective chairs is based on expertise within the sub-discipline, experience with faculty searchers and their ability to lead a team. Once identified, the head and Head's Advisory Committee assemble the team. Committee membership is representative of the Department."
"Any regular faculty member is eligible for membership. Normally the chair is a full professor. In addition, we try to have broad representation across specializations, as well as focused representation in areas in which we are hiring. The number of women on these committees is above the proportion of women faculty in our department. This is more an accidental consequence of the priority areas in hiring."
"Members must be an appointed faculty member or affiliate of the department, the chair should have acknowledged expertise in the particular field. Chair is chosen based on anticipated ability to contribute expertise and having contacts in the field." "All regular faculty members are members. The Chair is the Head of the Department."
"All are eligible to sit on the committee or chair search committees. Determining factors are expertise in area of job search, availability of time and willingness to undertake duties."

Department heads were also asked to report the number of persons working on resource allocation committees and serving as chairs on these committees over the period of May 2002 and April 2005 in their departments, broken down by gender (HS Q17). Similar to hiring committees, more men than women worked on resource allocation committees and more men chaired these committees over the three years. In only two departments, women chaired the committees. One department noted that a woman played a major role in charge
of space and facilities. Another department reported that in their department, the Facilities Committee had equal numbers of women and men but there were no women on the Merit Committee. Still another department indicated that the Merit Committee was comprised of volunteers but none of them were women, and that when the Head appointed the committee in another year, one woman was included. Explanations were that junior ranks contained proportionally more women than the senior faculty so committees at present had a smaller proportion of women faculty than the department as a whole.

### 2.3 Leadership at UBC

Faculty members were asked about the affiliation of the mentor or senior person in the field who had recommended them for at least one of five provided roles/responsibilities: joining a review panel, being an invited speaker, competing for awards, joining a research collaboration, and being on an editorial board (FS Q13). Figure 14 shows that large proportions of the respondents ( $34 \%$ to $51 \%$ ) had been recommended by a mentor outside UBC for four out of the five responsibilities except awards (13\%). About 5\% of the total respondents had not been recommended for any of the given responsibilities.

Figure 14:


Significant rank differences were found in affiliation of the mentor that had recommended faculty for review panels (FS Q13.1) and editorial boards (FS Q13.5). As shown in Figure 15, a significantly higher percentage of associate professors (18\%) reported having been recommended for review panels by a mentor from their departments than those of both assistant professors (4\%) and full professors (3\%). A significantly greater proportion of full professors indicated having been recommended for an editorial board by a mentor outside UBC (57\%) than that of assistant professors (21\%) and of associate professors (29\%).

Figure 15:
Affiliation of the mentor: Rank differences
Affiliation of the mentor recommending for review panels


Affiliation of the mentor recommending
for editorial boards


Faculty members were asked in what capacity they had held leading positions in research networks or committees and how they took the positions (FS Q14). One fifth of the total respondents reported not having held a leadership position. Out of those having held leading positions, most were in their departments or fields, rather than serving UBC as a whole (Figure 16).

Figure 16:

## Capacities for leadership as a percentage of respondents <br> having held a leadship position



Faculty members reported how much time they had spent on committees (or other service) that benefited their careers in the last five years, relative to their departmental peers (FS Q15). Overall, 23\% of the respondents indicated "more time" and 21\% "less time" on beneficial committees. A significantly larger proportion of the male respondents than female respondents ( $26 \%$ versus $14 \%$ ) reported that they had spent more time on beneficial committees/services; $16 \%$ of the males and $38 \%$ of the females reported "less time" on beneficial committees/services (Figure 17).

Figure 17:
Perceived amount of time spent on career-benefiting committees: Gender difference


When asked how much time they had spent on committees (or other service) that did not benefit their careers in the last five years, (FS Q16). Of the faculty respondents, $45 \%$ reported "more time" and 9\% indicated "less time" compared to their departmental peers. A significantly higher percentage of full professors reported having spent "more time" on non-beneficial committees than assistant professors (57\% versus 23\%); 5\% full professors
and $19 \%$ assistant professors indicated "less time" spent on beneficial committees (Figure 18).

Figure 18:
Perceived amount of time spent on non-career-benefiting committees: Rank differences


The low percentages of senior female faculty members may be related to the very low proportion of females holding a senior administration position and the relatively low percentages of female award winners, as shown in Table 1 and Figure 19. It may also be related to females reporting less time than males on committees benefiting their careers, as reported earlier, depending on whether appointment to these committees correlates with seniority.

Table 1 shows the numbers of female and male faculty members holding a senior administration position in FoS (in the dean's office and the nine departments) from 1995 to 2005. Over the period, all department heads were male. From 2002 to 2005, no deans or associate deans were female.

Table 1: Numbers of faculty members in senior administration position: 1995-2005

|  |  | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dean $\quad /$ <br> Associate <br> Dean (FoS) | Female | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 |
|  | Male | 4 | 3 | 3 | 2 | 3 | 4 | 3 | 4 | 4 | 5 | 4 |
| Dept. Head | Female | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Male | 12 | 9 | 10 | 9 | 9 | 9 | 10 | 9 | 8 | 9 | 9 |

Figure 19 shows that, from 1995 to 2005, the proportion of female full professors remained almost static while the percentage of female associate professors in FoS increased steadily from $5 \%$ to $28 \%$ over the years.

Figure 19:
Percentages of female faculty by rank: 1995-2005


The Focus Group participants stated that while there were formal channels for promotion and leadership, informal measures commonly circumvented these. The lack of a clear, transparent process resulted in confusion about selection and decision criteria. Many participants felt that being selected for leadership positions was not necessarily a desired goal, but rather something that individuals did to be of service. Furthermore, they called for stability in leadership especially at the Dean and VP research levels.

### 2.4 Awards

Figure 14 shows the numbers of male and female faculty members in FoS who won the five key research and teaching awards from 1996 to 2006. Over the ten years, no female faculty won the Distinguished University Scholar award and 7\% of the Killam Research Fellowship award and the Killam Research Prizes went to females. 10\% of the Canada Research Chairs and $16 \%$ of the Killam Teaching Prize recipients were female. However, the proportion of female faculty in FoS increased from 11\% in 1996 to 19\% in 2005.

Figure 20:
Numbers of award winners by gender: 1996-2006


Table 2 shows the numbers and percentages of male and female faculty members who were awarded CIAR, CIHR and NSERC grants in 2004/05.

Table 2: Numbers of CIAR, CIHR and NSERC grant winners and the percentages of total recipients (2004/2005)

| Female | Number | 0 | CIAR | CIHR |
| :--- | :--- | :---: | :---: | :---: |
|  | N | 0 | 14 | 66 |
|  | Percentage | 0 | $29 \%$ | $17 \%$ |
| Male | Number | 5 | 35 | 319 |
|  | Percentage | $100 \%$ | $71 \%$ | $83 \%$ |

Data over a longer time period and also on the success rates of the grant applications were not available. It would be helpful if the Dean's office could track these data in the future.

When asked about the affiliation of the mentor who had recommended them for awards (FS Q13.3), a higher percentage of male respondents than females ( $16 \%$ versus $4 \%$ ) reported that they had been recommended by someone outside UBC for awards (Figure 21). A higher percentage of female respondents than males indicated that they had been recommended by their department ( $26 \%$ versus $14 \%$ ) and that they were not recipients (33\% versus 25\%).

Figure 21:


Figure 22 shows that the percentage of assistant professors who believed mentors outside of UBC had recommended them for awards was significantly higher than the percentage of associate or full professors recognizing mentors outside UBC as those recommending them for awards ( $19 \%$ versus $10 \%$ and $12 \%$ ). Also, a significantly higher proportion of assistant professors than those of associate and full professors were not award recipients (54\% versus $20 \%$ and $16 \%)$.

Figure 22:
Affiliation of the mentor recommending for awards: Rank differences


## 3. HIRING

Faculty members were asked about faculty recruitment and hiring policies and procedures (FS Q30, 32.3) and their perception of efforts on the part of their departments to recruit qualified women candidates for faculty positions (FS Q31). Department heads were asked about UFA (University Faculty Awards for women) advertisements posted by their departments (HS Q12), major strategies and barriers and aboriginal candidates in terms of hiring women from 2000 to 2005 (HS Q10), and formats for communicating hiring policies to faculty members (HS Q14).

Data on candidate pools (graduates, post-docs and research associates), new hires and FoS faculty over the 1995-2005 period are also presented in this section.

### 3.1 Hiring Policies and Procedures

Faculty members were asked to what extent the policies and procedures in their departments for faculty recruitment and hiring were clear (FS Q30). Of the total respondents, 37\% reported recruitment and hiring policies/procedures as "very clear" and $4 \%$ indicated "very unclear" or "ad hoc" (Figure 23).

Figure 23:
Perceived clarity of recruitment and hiring policies


Significant gender differences were found in the perceptions of hiring policies (Figure 24). On perceptions of recruitment and hiring policies, $24 \%$ of the female respondents and $41 \%$ of the male respondents perceived the policies as "very clear". A total of $10 \%$ of the females reported that the policies were "very unclear" or "ad hoc" whereas $3 \%$ of the males reported "very unclear".

## Figure 24:

## Perceived clarity of recruitment and hiring policies: Gender differences <br> Male



$\square$ Very Clear
$\square$ Somewhat clear/unclear

- Very unclear
$\square$ Ad hoc
$\square$ Not familiar

In response to the statement that the hiring and search policies at their departments served to increase diversity (FS Q32.3), $24 \%$ and $49 \%$ of the total respondents reported "strongly agree" and "somewhat agree" with the statement. Significant difference was found between MCS and PS; 31\% of the MCS respondents, in contrast with $13 \%$ of the PS respondents, reported "strongly agree" with the statement (Figure 25). Also, a significantly higher percentage of the male respondents "somewhat" or "strongly" agreed with the statement (Figure 26).

Figure 25:

> Perceptions that hiring and search polices serve to increase diversity: Differences in departmental grouping


Figure 26:
Perception that hiring and search policies served to increase diversity: Gender difference


Faculty members reported how much effort, in their opinion, their departments had made to identify and attract qualified women candidates for faculty positions (FS Q31). Overall, $52 \%$ and $46 \%$ of the respondents perceived "a lot of effort" and "some effort" on the part of their departments to recruit women faculty. A significantly higher percentage of males than females ( $59 \%$ versus $28 \%$ ) indicated that "a lot of effort" had been made to recruit female faculty (Figure 27).

Figure 27:

## Perception of efforts made to recruit female faculty: Gender difference




### 3.2 Hiring Trends

To examine whether the proportion of current female faculty at FoS represents the available pool of female candidates, longitudinal trends in numbers of earned master's and doctorate degrees in Science in Canada from 1992 to 2003 (Figure 28), female graduate student enrolment at FoS from 1996 to 2005 (Figure 29), and the percentages of female post-docs and research associates in each departmental grouping at FoS from 1995 to 2005 (Figure 30) were investigated.

Over the years from 1992 to 2003, the percentages of master's degrees and doctorate degrees awarded to females increased from $35 \%$ to $45 \%$ and from $25 \%$ to $32 \%$ respectively (Figure 28).
Figure 28:
Numbers of earned graduate degrees in Science in Canada: 1992-2003


Figure 29 shows that, during the period of 1996-2005, the percentage of female PhD students registered in the FoS increased from 27\% to 34\%, peaking in 2003 (37\%) while the female Master of Science student enrolment dropped from $45 \%$ to $39 \%$ during the same time period. From 1999 to 2003, the percentage of female Master of Software Systems students varied from $24 \%$ to $37 \%$.

Figure 29:
Percentages of female graduate student enrolment at FoS: 1996 to 2005


In all departmental groupings, there was an increasing trend in the percentage of female post-docs from 1995 to 2005 (Figure 30). In LS, the percentages of female post-docs increased from $18 \%$ to $47 \%$. In PS, the increase was from $13 \%$ to $33 \%$ in 2001 and
dropped to $23 \%$ in 2005. In MCS, the increase was from $7 \%$ to $28 \%$ with the highest percentage of $31 \%$ in 2001.

In LS and PS, the percentages of female research associates varied from year to year over the period of 1995-2005 (Figure 30). The percentages were mostly from $40 \%$ to $50 \%$ in LS. In PS, the proportions were mostly between $15 \%$ and $25 \%$. There had been no female research associates in MCS until 2004 and the percentages of females were $25 \%$ in 2004 and $50 \%$ in 2005.

Figure 30:
Proportions of female post-docs and research associates at FoS by departmental grouping: 1995-2005

Percentages of female postdocs and research associates in LS


Percentages of female postdocs and research associates in PS


Percentages of female postdocs and research associates in MCS


The percentages of male and female faculty in all ranks hired in the past eleven years in the Faculty of Science are shown in Figure 31. The average percentage of female new hires over the period was $20 \%$. Assistant professors constituted over half ( $50 \%$ to $88 \%$ ) of the new hires each year.

Figure 31:
Percentages of new hires by gender: 1995-2005


New Hires by Gender: 1995-2005


A comparison was made between the proportions of new female hires in all new hires and the percentages of female faculty in total faculty in each academic rank over years of 19951999 and 2000-2005. Table 3 shows that on average, the proportions of new instructors/senior instructors and assistant professors in FoS that were female were below the percentages of the FoS faculty who were female during the two five-year periods. While the percentage of newly hired female full professors seemed to exceed the actual percentage of female full professors in the two periods, the number of new female full
professors was very small; over the eleven years, only three new full professors were female.

Table 3: Comparisons between new female hires and female faculty: Periods of 19951999 and 2000-2005

|  | 1995-1999 |  | 2000-2005 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Female \% of new FoS Hires | $\begin{gathered} \text { Female \% } \\ \text { of FoS } \\ \text { Faculty } \end{gathered}$ | Female \% of new FoS Hires | $\begin{gathered} \text { Female \% } \\ \text { of FoS } \\ \text { Faculty } \\ \hline \end{gathered}$ |
| Instructor/ Senior Instructor | 40\% | 52\% | 22\% | 44\% |
| Assistant Professor | 17\% | 25\% | 24\% | 28\% |
| Associate Professor | 0\% | 7\% | 36\% | 21\% |
| Full Professor | 11\% | 3\% | 8\% | 3\% |

Figure 32 shows the total numbers of male and female faculty members from 1995 to 2005. Over the years, as previously shown in Figure 19, among the female faculty members, the proportion of associate professors increased steadily to $28 \%$ while the percentages of full professors who were female remained almost constant, ranging from $2 \%$ to $4 \%$. In 2005, $52 \%$ of male faculty and $11 \%$ of female faculty held the rank of full professor in FoS.

Figure 32:
Total faculty by gender: 1995-2005


### 3.3 Hiring Policies, Challenges and Strategies

Department heads were asked to report the numbers of UFA (University Faculty Awards ${ }^{10}$ ) advertisements posted by their departments per year from 2000 to 2005 (HS Q12). The numbers by departmental grouping are shown in Table 4. Of the nine departments, three

[^3]reported posting a UFA advertisement every year, two reported posting in some of the years, and four indicated no posting.

Table 4: Numbers of UFA advertisement posted from 2000 to 2004

|  | $\mathbf{2 0 0 0} / \mathbf{0 1}$ | $\mathbf{2 0 0 1 / 0 2}$ | $\mathbf{2 0 0 2 / 0 3}$ | $\mathbf{2 0 0 3 / 0 4}$ | $\mathbf{2 0 0 4 / 0 5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| MCS | 2 | 3 | 2 | 1 | 1 |
| PS | 3 | 2 | 2 | 2 | 2 |
| LS | 0 | 0 | 0 | 0 | 0 |

Although using NSERC UFA programs was recognized by four departments as "wonderful" and a helpful strategy in hiring women (HS Q10b), the sustainability of UFA bridging strategies was reported by department heads as a major barrier to hiring women in their departments using the UFA program over the last five years (HS Q10a).

The NSERC UFA program was also raised as an issue in the Focus Groups, with several reports of there being a stigma attached to being hired under the UFA program.

Department heads listed major barriers to hiring women in their departments over the last five years (HS Q10a). The major barriers identified, in addition to those listed for the UFA program, were

- less proactive spousal hiring policy than other North American institutions
- insufficient candidate pool, including a shortage of qualified women from graduate schools
- the "two-body" problem ${ }^{11}$ encountered, more often, by female candidates than male candidates
- excessively bureaucratic Senior Appointments Committee (SAC) ${ }^{12}$ and immigration policies in Canada

Department heads were asked to describe strategies helpful in hiring women in their departments over the last five years (HS Q10b) and list the elements in their hiring strategies that included gender, diversity and ethnicity considerations (HS Q14ab). All nine department heads indicated that gender, diversity and ethnicity considerations were included in their hiring strategies The identified strategies and related elements, in addition to the UFA program, were

- recruiting: advertising positions in women-targeted newsletters; and asking all female applicants for reference letters; broadening recruiting posts; following the UBC policy on advertising faculty positions to attract as many qualified male and female candidates as possible
- hiring process: making special efforts in candidate selection and interview decisions; getting all regular faculty to be on the departmental appointment committee; ensuring representativeness and diversity on the search committee for

[^4]balanced consideration of all applicants; making explicit discussions at department meetings before generating short lists; ensuring qualified women to be represented on short lists; ensuring the presence of a female faculty member at lunch or dinner for female interviewees; highlighting the supportive departmental environment for women faculty during interviews with female applicants;

- principles: merit-based employment and commitment to equity;
- decision-making: giving special considerations to under-represented groups in the case of equal merit between two candidates; allowing flexibility in rank for appointment of applicants from under-represented groups who possess exceptional qualifications; ensuring women represented on the short list if qualified; allowing flexibility when the slot was targeted for a woman (e.g., the UFA program).
- two-body problem: removing research area considerations when evaluating the spouse in a "two body" situation.

Department heads reported a variety of formats for communicating the hiring policies to the faculty in their departments (HS Q14c). Eight out of the nine departments responded to the question. The following ways of communication were reported:

- providing search committee members with copies of UBC's hiring policy, the UBC Faculty Recruitment Guide, the UBC Equity Office document Promoting Equity in Employment at UBC ${ }^{13}$
- listing hiring principles in the hiring plan, and circulating and discussing the hiring plan and recruitment strategies at departmental meetings and retreats
- posting and updating recruitment policies on departments’ internal websites
- rotating all the regular faculty so that virtually all eventually serve on the Committee on Appointments where hiring-related matters were discussed

Department heads were asked whether there was a policy in their departments to have both women and men on hiring committees, and, if so, a copy of the written policy was requested (HS Q16). Five out of the nine departments reported that there was such a policy. However, none of the departments attached a written policy. Three of the four departments who answered "no" provided comments that it was the practice, or the unwritten rule/policy, to have at least one women or a "balanced representation" on hiring committees. One department stated that this policy/practice was communicated through personal meetings with junior faculty.

### 3.4 Input from Focus Groups

Focus Group participants repeatedly brought up the cost of housing in Vancouver as a hiring and retention challenge, noting that UBC housing and co-development housing were of minimal assistance. Comparison with other universities in expensive cities (e.g. UC Irvine, NYU, or U Chicago) was recommended for revising faculty housing assistance.

[^5]A second prominent issue in the discussion of recruitment was the lack of availability of childcare. This is discussed further in Section 7.

## 4. SALARY AND RETENTION

Faculty members were asked about perceptions of their salary compared to peers (FS Q4) and previous efforts to seek positions outside UBC (FS Q36).

Also presented in this section are data on average faculty salaries as a percentage of the average salaries of departmental groups and ranks for 2004 and received retention funding from 1998 to 2005.

### 4.1 Salary

Faculty members were asked to rate their salary compared to peers in their departments in the last five years (FS Q4). Of the total respondents, $54 \%$ reported that their salary was "average" compared to peers, and $25 \%$ and $21 \%$ responded with "below average" and "above average" respectively.

Figure 33 shows that MCS respondents reported significantly more positively about their salary than PS respondents when comparing to their peers in their departments (FS Q4). While a slightly higher percentage of the MCS respondents than that of the PS respondents ( $55 \%$ versus $50 \%$ ) reported "average", $31 \%$ of the MCS respondents, as compared to $14 \%$ of the PS respondents, perceived their salary as "above average". A significant difference was also found between full professors and associate professors. A significantly higher percentage of full professors perceived "above average" than that of associate professors ( $34 \%$ versus $14 \%$ ) while almost the same proportion ( $48 \%$ ) of the full professor and associate professor respondents reported their salaries were "average".

Figure 33:
Perceptions of salary compared to peers: Group differences


Focus Group comments indicated a feeling of second-class citizenship among some instructors given the divergent salaries between the teaching and research streams.

Table 5 gives the 2004 average salaries of male and female faculty members by rank and departmental grouping as a percentage of the average salaries of their respective
departmental group and rank. In MCS, female assistant and associate professors had average salaries that were $3 \%$ and $11 \%$ higher than their male counterparts. In PS, the average salary of female instructors was $3 \%$ above that of male instructors, while among assistant and associate professors, females had average salaries approximately $1 \%$ less than those of males. In LS, female instructors and assistant professors earned 3\% more than their male counterparts, while female associate professors earned $15 \%$ less than male associate professors. Comparing all full professors, the average salary was about the same for males and females ${ }^{14}$. Average salaries by departmental group were not reported due to very small numbers in some cases.
Table 5: Average salaries for male and female faculty members as a percentage of the average salaries of their departmental group and rank for 2004

|  | MCS |  | PS |  | LS |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | Female | Male | Female | Male |
| Associate Professor | $110 \%$ | $99 \%$ | $99 \%$ | $100 \%$ | $92 \%$ | $107 \%$ |
| Assistant Professor | $102 \%$ | $99 \%$ | $99 \%$ | $100 \%$ | $102 \%$ | $99 \%$ |
| Instructor/Senior <br> Instructor | $*$ |  |  |  |  |  |

* There were no female instructors/senior instructors reported at that time in MCS.

Administration data also show a gender difference in salaries when compared by seniority (Figure 34). The difference widened as the number of years from PhD increased. For faculty with 0-6 years from PhD, the average salary was slightly higher for females than for males. For faculty with 7 years and more from PhD , females had lower average salaries. Female faculty with 25 years and more from PhD earned, on average, \$30,440 less than males in this group. The significance of this finding is limited due to the very small number of female full professors. Since rank was not reported with these data, it is impossible to check whether rank was a factor influencing salaries.

Figure 34:
Average salaries by gender and years from Ph. D. in 2004/2005


[^6]The numbers of faculty members who had received retention funding and the averages of the received retention funding from 1998 to 2005 are shown in Figure 35. Over the period, the percentages of female faculty members having received retention funding ranged from $0 \%$ (in 2004/05) to $17 \%$ (in 2002/03 and 2005/06). On average, of those awarded retention funding, females received $\$ 2,975$ less than males. The annual mean difference in retention funding received by males and females varied from $\$ 739$ (in 2005/06) to $\$ 7,441$ (in 2004/05).

Figure 35:
Received retention funding: 1998-2005


When asked to indicate whether they had ever sought outside positions since joining UBC (FS Q36), 31\% of the total respondents reported "yes" to the question, with $36 \%$ of males and $14 \%$ of female indicating "yes". There were significant differences by rank. A significantly higher proportion of full professors had ever sought positions outside UBC than either associate or assistant professors (43\% versus 20\% and 15\%), (Figure 36).

Figure 36:
Having sought outside positions: Rank difference


Faculty members were also asked to report the reasons for their seeking positions outside UBC (FS Q36). Low salary was a reason mentioned most often by male respondents. The combination of low salaries and high housing prices in Vancouver for young faculty with families was also mentioned. Other reasons repeated by males were unfairly heavy teaching loads, lack of support by the department, lack of opportunities for career advancement, lack of resources (funding, technical support), departmental climate (inadequate engagement
with the university as a whole), and the "two body" problem. Female respondents also reported financial issues (salary and research-wise), lower teaching loads elsewhere, and dissatisfaction with department support as their reasons for seeking positions outside UBC. In addition, the females also mentioned unfair prejudice by university administration against work, difficulty in career advancement due to gender and scientific specialization that was different from older members of the department, and the intention to be closer to family and go back to their home country. In the Focus Groups, the cost of housing also arose as an issue for retention.

## 5. DEPARTMENTAL CLIMATE, DISCRIMINATION AND HARRASSMENT

A range of issues relating to working climate were covered in the assessment, with significant results falling into three categories: overall departmental climate, discrimination and harassment.

### 5.1 Departmental Climate

Faculty members were asked to rate various aspects of departmental climate described by a battery of eleven "polar" adjectives (friendly and hostile, racist and non-racist, homogeneous and diverse, disrespectful and respectful, collegial and contentious, nonsexist and sexist, collaborative and individualistic, cooperative and competitive, homophobic and non-homophobic, threatening and supportive, and flexile and rigid) placed on a four-point sliding scale (FS Q27). Figure 37 shows that in nine out of the eleven areas, $75 \%$ or more of the respondents reported on the positive side of the scale, as indicated by 3 and 4. Lower than the others were the responses in favour of "diverse" versus "homogeneous" (71\%) and those in favour of "collaborative" versus "individualistic" (59\%).

Figure 37:
Perceptions of departmental climate: negative (1) to positive (4)


Significant differences by departmental grouping were found in seven out of the eleven areas regarding the departmental climate (FS Q27). As shown in Figure 38, PS respondents reported a significantly less "diverse" climate than LS respondents and a significantly less
"non-sexist" and "supportive" climate than MCS respondents. PS respondents also perceived a significantly less "respectful", "cooperative", "flexible" and "self-confidence promoting" climate than either LS or MCS respondents.
Figure 38:
Perceptions of departmental climate by departmental grouping

Perceptions of departmental climate: Homogeneous (1) to diverse (4)


Perceptions of departmental climate: Threatening (1) to supportive (4)


Perceptions of Departmental Climate:
Competitive (1) to Cooperative (4)


Perceptions of departmental climate:
Conductive to insecurity (1) to promotes self-confidence (4)


Perceptions of departmental climate:
Sexist (1) to non-sexist (4)


Perceptions of Departmental Climate: Disrespectful (1) to Respectful (4)


Perceptions of departmental climate: Rigid (1) to flexible (4)


In addition, a significantly greater proportion of men perceived a "non-sexist" climate than females (FS Q27.6) (Figure 39).

Figure 39:
Perceptions of departmental climate: Gender differences Sexist (1) and non-sexist (4)


Another group of questions regarding departmental climate was asked to investigate how faculty members perceived the following statements (FS Q32.1-10): "Faculty members are treated fairly by their colleagues" (1); "Faculty members are treated fairly by their department heads" (2); "The hiring and search policies serve to increase diversity" (3); "Administration and service loads are distributed fairly" (4); "Sabbatical leaves are handled fairly" (5); "The tenure and promotion policies/procedures are fair" (6); "High expectations of success are placed on male faculty members" (7); "High expectations of success are placed on female faculty members" (8); "Diversity is often addressed in departmental reviews" (9); "Teaching loads are distributed fairly" (10). Figure 40 shows that six of the ten areas had $90 \%$ of the respondents reporting "strongly agree" and "somewhat agree" with the statements, with relatively low evaluations in diversity being addressed in departmental reviews (38\%), fairness in distributing administration loads (63\%), hiring policies serving to increase diversity (73\%), and fairness in distributing teaching loads (74\%).

Figure 40:
Perceptions of departmental policies/procedures


MCS respondents perceived significantly more positive perceptions of fair treatment by colleagues (FS Q32.1) and fairness in distributing administration and service loads (FS Q32.4) than the PS respondents. Figure 41 shows that 74\% MCS respondents and 39\% PS respondents reported "strongly agree" that they were treated fairly by colleagues; and 40\% MCS respondents and 7\% FS respondents indicated "strongly agree" that administration and service loads are distributed fairly.

Figure 41:

> Perceptions of fair treatment by colleagues and fairness in distributing administration loads: Differences in departmental groupings


Perceptions of fairness in distributing administration loads


In terms of fairness in handling sabbatical leave (FS Q32.5), full professors had a significantly more positive perception than assistant professors, with $68 \%$ and $29 \%$ respectively "strongly" agreeing with the statement that sabbatical leaves are handled fairly.

Figure 42:

## Perception that sabbatical leaves are handled fairly: <br> Rank difference



Figure 43 shows that a significantly higher percentage of men than women (57\% versus 38\%) reported "strongly agree" with the statement that high expectations of success were placed on male faculty members (FS Q32.7). No gender difference was found in the perception that high expectations of success were placed on female faculty members (FS Q32.8).

Figure 43:
Perceptions on expectations: Gender differences


Figure 44 shows that male respondents reported a more positive perception that diversity was often addressed in departmental reviews (FS Q32.9), with 42\% male respondents and $25 \%$ female respondents indicating either "somewhat agree" or "strongly agree" with the statement. Also, a significantly higher percentage of the assistant professors "somewhat" or "strongly" agreed with the statement than that of the associate professors ( $56 \%$ versus 26\%).
Figure 44:

## Perception that diversity is often addressed in departmental reviews: Group differences



Significant differences among groups with regard to hiring policies (FS Q32.3), tenure and promotion policies (FS Q32.6), and teaching loads (FS Q32.10) are reported in the Section 3(Hiring), Section 2(Tenure, Promotion and Leadership), and Section 6(Teaching and Mentoring).

Faculty members identified factors that contributed negatively and positively to the departmental climate (FS Q28). Positive comments included strong sense of collegiality, collaborative, supportive, inclusive and caring community, enjoyable and friendly colleagues (faculty and staff), fantastic leadership (department heads and chairs), open and clear communication, and social activities.

Examples of positive factors provided by female faculty were (a) collaborative and supportive community; (b) enjoyable, "great" colleagues; (c) good chair, (d) great department; (e) very good leadership over past 10 years; (f) "donut days!"; (g) willingness to listen to opposing points of view; (h) exceptional senior faculty; (i) open communication;
(j) great staff members; (k) supportive group of female faculty; (l) supportive informal mentoring of junior faculty.

Examples of male faculty provided many positive comments which are grouped below: (a) very good administrative staff; (b) fantastic Department Head (repeated comments); (c) great group of people, good colleagues; (d) strong sense of collegiality (repeated comments); (e) chair doing a good job; (f) clear department communication; (g) clustering of researchers with similar interests allows for high degree of synergy; (h) mutual respect; (i) great acceptance of diversity; (j) supportive, friendly department (repeated comments); (k) dynamic, open to change; (l) friendly faculty members; (m) sense of common purpose; ( n ) cooperative; (o) fair and open discussions of Department problems; (p) great students; (q) faculty with health problems are treated in a caring way; (r) non-racist; (s) social activities of the department; ( t ) inclusive, open, supportive, flexible department environment; (u) general transparency of policies.

Repeated negative comments were fragmentation of the department, some hostile actions leading to tension and space allocation problems, undue reward of those faculty members who neglected teaching and administrative duties in favour of research, unfairness in teaching loads, overwhelming or unevenly distributed administrative work loads, and racist comments and slurs.

Examples of negative comments provided by female faculty: (1) people with "oversized egos" and "rigid convictions"; (2) "too fragmented" department; (3) difficult personalities or those with a lack of social skills contribute to the tension in the department; (4) lack of informed direction; (5) hostile emails; (6) rookie administration; (7) turnover in staff; (8) space allocation problems.

Examples of negative comments provided by male faculty: (1) a few hostile faculty create tension by treating faculty, students and staff rudely; (2) faculty that don't carry their weight in teaching, research or committees; (3) dilapidated office furniture; (4) "negative attitudes toward women", an "old boys club", "subtle discrimination against women so that female faculty are asked to teach a grad service course in their first year"; (5) a few research areas are disparaged, factionalism - some research areas are seen as more important than others; those who neglect teaching and administrative duties in favour of research are rewarded (repeated comments); (6) acting arbitrarily without regard to input; (7) unfairness in teaching loads (repeated comments); (8) concrete departmental goals are not defined enough, which leads to an emphasis on individuals goals; (9) disorganized, laissez-faire; (10) faculty spread out over several buildings; (11) workload is high so everyone is busy; (12) administrative loads too high (faculty have to spend time photocopying large volume of material) or seen to be distributed unevenly (repeated comments); (13) feeling left out; (14) racist comments and slurs (repeated comments); (15) department head does not listen, making decisions arbitrarily; (16) too competitive department climate that compromises work/family balance; (17) lack of collaboration; (18) politics and power games; (19) unsupportive, undemocratic, threatening environment; (20) not very diverse; (21) office space inequity and lack of lab space (22) availability of graduate student funding; (23) lack of funds, lack of information to junior faculty about
performance expectations, lack of research support, lack of mentoring, (24) resistance to change, "set in their ways" (25) very inequitable rates of pay.

Focus Group participants identified inequitable teaching loads as one of the major challenges FoS faced as this created a two-class system and bred resentment among departmental members.

### 5.2 Discrimination

Faculty members were asked to indicate whether they had perceived any discrimination in nine job-related areas within the past five years on the basis of ethnicity, gender, sexual orientation, physical disability, religious affiliation and age (FS Q35). Between $88 \%$ and $94 \%$ of the respondents did not perceive discrimination of any kind in access to administrative staff, graduate student and teaching assistant assignments, tenure or promotion, and mentor availability.

Figure 45 shows that, overall, a higher percentage of males than females perceived no discrimination in the nine areas. There were significant gender differences in hiring (89\% versus $79 \%$ ), salary ( $92 \%$ versus $68 \%$ ), resources ( $89 \%$ versus $70 \%$ ), access to administrative staff ( $95 \%$ versus $82 \%$ ), mentor availability ( $99 \%$ versus $92 \%$ ), and leadership opportunities ( $96 \%$ versus $74 \%$ ).

Figure 45:

> Perceived "no discrimination" in job-related areas: Gender difference


Discrimination was reported with respect to salary, space/equipment/resources, hiring, and leadership opportunities (Figure 46). The figure shows that salary- and leadership-related discriminations were most highly perceived as based on gender and that resources- and hiring-related discriminations were most highly perceived as based on age or a combination of these factors.

Figure 46:
Percentages of respondents perceiving job-related discrimination on the basis of ethnicity, gender and age


Gender differences were also found in the perceived basis for discrimination. A greater proportion of the male respondents reported age-based discrimination in salary, space/equipment/resources, and access to administrative staff. A greater proportion of the female respondents reported gender-based discrimination in salary, access to administrative staff, and mentoring availability. For hiring, females reported age-, ethnicity- and genderbased discriminations, or a combination of them approximately twice as often as males. For leadership opportunities, females reported age-, ethnicity- and gender-based discriminations, or a combination of them over six times as often as males (Figure $47{ }^{15}$ ).

Figure 47:
Perceived basis for job-related discrimination: Gender differences


Significant rank difference was found in space/equipment/resources-related discrimination. Figure 48 shows that $90 \%$ of the full professors, compared with $77 \%$ of the assistant

[^7]professors, perceived no discrimination of any kind. Figure 48 shows that assistant professors were the group that had the highest proportion of respondents reporting resources-related discrimination on the basis of age (15\%) and associate professors were the group that had the highest proportion of respondents reporting gender-based discrimination (11\%).

Figure 48:
Rank differences in resources-related discrimination


Significant differences were also found in resources- and hiring-related discrimination by departmental grouping (Figure 49). In terms of resources, 98\% of MCS respondents did not report discrimination of any kind whereas $69 \%$ of LS respondents reported no discrimination. With respect to hiring, $12 \%$ of the MCS and LS respondents reported either gender-based or age-based discrimination; $16 \%$ of the PS respondents perceived the discrimination on the basis of combined factors of gender, age and ethnicity.

Figure 49:

## Bases for resources- and hiring-related discrimination: <br> By departmental grouping



Focus Group participants emphasized the importance of having women represented on committees to help create mechanisms that ensure equity in hiring and nomination decisions. Federal funding agencies and UBC often require that one or two women on grant review committees to ensure fairness and compliance with employment equity or antidiscrimination laws. This requirement, however, puts an extra demand on women.

### 5.3 Harassment

When asked about their perceptions of harassment ${ }^{16}$ in the departments in the past five years (FS Q32.11-13), the vast majority of the respondents reported that they "somewhat" or "strongly" agreed that cases of harassment were rarely experienced ( $27 \%$ and $64 \%$, respectively) and that reporting harassment was encouraged ( $60 \%$ and $25 \%$, respectively). A majority of respondents (66\%) indicated that they "somewhat" (29\%) or "strongly" (37\%) agreed that cases of harassment were rarely reported (Figure 50).

Figure 50:
Perception of cases of harassment


Figure 51 shows that all LS respondents and $94 \%$ MCS respondents strongly or somewhat agreed with the statement that harassment had been rarely experienced (FS Q32.11), whereas $80 \%$ PS respondents had the same perceptions.

[^8]Figure 51:

## Perception that cases of harassment are rarely experienced: Differences among departmental groupings



Rank differences existed in the perception that harassment had been rarely experienced (FS Q32.11) as well; 57\% associate professors, as contrasted with $35 \%$ assistant professors and 25\% full professors strongly agreed with the statement (Figure 52).

Figure 52:
Perception that cases of harrassment are rarely reported: Rank differences


Faculty members were asked to indicate whether they had ever experienced cases of harassment at UBC and whether they were reported (FS Q33). Figure $53{ }^{17}$ shows that a higher percentage of females than males experienced harassment and that this was true in both reported and non-reported cases of harassment.

[^9]Figure 53:
Reported experiences of harassment


Department heads were asked to provide the numbers of harassment cases reported in the past five years (HS Q19). Three out of the nine department heads indicated that harassment cases had been reported. One department noted that a complaint was filed with the Equity Office and later withdrawn.

## 6. TEACHING AND MENTORING

With regard to teaching and mentoring, faculty members were asked about their teaching and mentoring loads and assignments when compared to peers (FS Q5-9). The amount and quality of mentoring they received (FS Q11, 12). Department heads were asked about teaching release and sabbatical leave policy (HS Q7, 9). Inquiries were also conducted about departmental mentoring policies (FS Q10, HS Q5).

### 6.1 Teaching Loads

Faculty members were asked to indicate the number of students, post-docs, research associates, and/or technicians they had supervised in the last five years (FS Q5). Table 6 shows the results.

Table 6: Reported numbers of individuals mentored by faculty members

|  | Standard <br> Deviation |  |  |
| :--- | :---: | :---: | :---: |
| Range |  |  |  |
| Undergraduate students | 6.2 | 5.6 | $0-34$ |
| Master students | 3.6 | 2.9 | $0-13$ |
| Doctoral students | 3.6 | 2.7 | $0-10$ |
| Post-docs/Research associates | 2.1 | 2.1 | $0-11$ |
| Technicians | 0.8 | 1.5 | $0-9$ |

There was no significant difference between men and women in reported teaching loads. Significant rank differences were found in the average number of individuals mentored by faculty members (Figure 54). Associate professors supervised a significantly greater number of undergraduate students in the last five years than assistant or full professors. Full professors supervised significantly more post-docs and research associates than assistant or associate professors and significantly more doctoral students than assistant professors.

Figure 54:
Average number of individuals mentored by faculty members:
Rank differences


When asked about their teaching load compared to peers in their departments in the past five years (FS Q7), 68\% of the total respondents reported that their teaching loads were "average", and $12 \%$ and $19 \%$ indicated "below average" and "above average" respectively when compared with peers.

Faculty members reported how many times they had reasonable teaching assignments compared to peers in their department in the past five years (FS Q8). Of the total respondents, $67 \%$ indicated that they "always" had reasonable teaching assignments; 23\%, 7\% and 3\% reported "several times", "a few times" and "never".

Overall, $31 \%$ and $43 \%$ of the respondents "strongly" and "somewhat" agreed with the statement that teaching loads were distributed fairly (FS Q32.10).

There were significant differences among departmental groupings in respondents’ perceptions of having reasonable teaching assignments (FS Q8) and fairness in teaching load allocation (FS Q32.10). Figure 55 shows that MCS respondents perceived having had reasonable teaching assignments significantly more often than their PS counterparts and rated distribution of their teaching loads as significantly fairer than both PS and LS respondents.

Figure 55:

## Perceived reasonable teaching loads and fairness in distribution: By departmental grouping




Department heads were asked to provide percentage of teaching release tor admınıstratıve service, percentage of teaching release for research or non-administration reasons, and gender for each of faculty members in their departments who had received releases for more than five of the past ten years (HS Q9) (i.e., frequent and on-going teaching buyouts for certain individuals). As shown in Table 7, all the recipients of these releases were male.

Table 7: Number of faculty members granted teaching release

|  | Release for administrative <br> service |  | Release for research or non- <br> administrative reasons |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 0 0 \%}$ <br> release | Less than $\mathbf{1 0 0 \%}$ <br> release | $\mathbf{1 0 0 \%}$ release | Less than 100\% release |
| Male | 4 | 5 <br> (ranging from <br> $25 \%$ to $90 \%$ ) | 5 | 7 <br> (ranging from <br> $33 \%$ to $66 \%$ ) |
| Female | 0 | 0 | 0 | 0 |

Focus Groups reported that some individuals were able to buy-out teaching using funding from external grants. This suggests that those with recurring course buy-outs may not have been reported, as such teaching buy-outs may not have been perceived or reported as "teaching release". Transparency in decision-making in teaching load allocation, and clarity on buy-out policies were recommended. Lack of transparency suggests necessity of further investigation.

Department heads reported more teaching releases in LS and PS departments than in MCS departments (HS Q9), which may be a contributing factor in the perception of unfairness of teaching load allocation in those two departmental groups. By contrast, in MCS departments, such teaching releases were much less prevalent, which may be a contributing factor in the perception of the strong sense of fairness in teaching loads in the MCS departments.

### 6.2 Teaching Leaves

Department heads were asked to report whether there was a policy in their departments for approval of sabbatical leave and, if so, to provide a written sabbatical leave policy (HS Q7a). Five out of the nine department heads responded "yes" to this question but only one attached their written sabbatical leave policy. The common comments included evaluation by the department head on a case-by-case basis, ensuring that courses and graduate student supervision would be covered while on leave, availability of funds for sessionals, and granting reasonable requests.

The comments are quoted as follows.
"In our department, it is the responsibility of the faculty member requesting leave to meet with their research group to ensure that the upper level courses typically covered by the group will be able to be covered while the requester is on leave. I also work to ensure that coverage of our lower level courses will be adequate considering the cohort of leave requests. The requester is also, of course, responsible for ensuring that graduate supervision is adequately covered while on leave. In the recent past, as long as the above are satisfied, a study leave request has been granted."
"We utilize UBC guidelines. Tenured Professors can take as much as one year of sabbatical leave every 7 years. Scheduling is subject to the Head's approval."
"Nothing written. All applications are evaluated by the head on a case by case basis."
Department heads were also asked how the sabbatical leave policy was communicated to faculty in their departments (HS Q7b). Two out of the nine department heads responded with " $\mathrm{n} / \mathrm{a}$ ". One of the departments reported that each year eligible faculty members were contacted and provided with a copy of the UBC policy and a checklist of things that would go with their applications. The other departments did not address the question directly but several of them suggested that faculty members initiated the process.

The comments are quoted as follows.
"Sabbatical leaves are routinely granted. . . . . [information removed due to confidentiality] . . . ability to cover teaching duties with minimal disruption is considered when granting sabbatical requests."
"Faculty members notify the Head and submits approval documentation, which follows official channels according to central University policy. The Department routinely gives its approval to qualified requests for sabbatical leave, provided that teaching and committee duties can be reassigned."
"If the requestor is not familiar, the discussion takes place when the leave request is made."
"We follow the UBC policy on sabbatical leave. Each year, eligible faculty are contacted and provided a copy of the UBC policy and a checklist of things that they must submit in order to ensure that their application is given full consideration." (Note: a page of departmental and UBC requirements and procedures attached)
"We do not have a sabbatical leave policy. Sabbatical leave applications that meet the minimum UBC rules are normally approved."
"If the faculty member is eligible for sabbatical leave, no reasonable application is denied."
"No formal policy is in place. Faculty contemplating sabbatical leave discuss their plans with Department Head. Approval is based on number of faculty wishing to take sabbatical leave, availability of other faculty to cover their teaching or administrative duties, and availability of funds to cover employment of sessional staff."

### 6.3 Mentoring

Faculty members were asked about their informal/formal mentoring loads for faculty/staff and students by comparing with their peers in the department and in the last five years (FS Q9). Figure 56 shows that about half of the respondents ( $49 \%$ to $56 \%$ ) reported the "same"; those reporting "less" mentoring responsibilities, both informal and formal, for faculty/staff outnumbered those reporting "more"; and more respondents indicated "more" informal mentoring responsibilities for students than those reporting "less".

Figure 56:
Mentoring load compared to peers


Not surprisingly, significant differences in rank and years from Ph. D. were found in informal and formal mentoring ${ }^{18}$ responsibilities for faculty/staff (FS Q9.1, 2). Figure 57 suggests that, compared with peers, full professors perceived a significantly higher mentoring load than both assistant professors and associate professors, and that faculty with $14-24$ years from obtaining PhD had a significantly higher mentoring load than those with less years from PhD. There was no significant difference in mentoring load for students.

Figure 57:
Perceived informal and formal mentoring load for faculty/staff as compared to peers: By rank and by years from obtaining PhD


Informal mentoring for faculty/staff as compared to peers
Formal mentoring for faculty/staff as compared to peers


Formal mentoring for faculty/staff as compared to peers

When asked whether their department had a formal mentoring program/policy (FS Q10), $62 \%$ of the total respondents reported "yes" and $38 \%$ indicated either "don't know" or "no" to this question. Comparing departmental groups, $46 \%$ MCS, $52 \%$ LS, and $87 \%$ PS respondents provided an affirmative answer to this question.

Department heads were asked whether there was a mentoring program/policy in their departments and, if so, provide a written mentoring policy (HS Q5). All but one department head reported that they had a mentoring policy; however only five departments attached their mentoring policy to the survey. The policies provided varied in substance and clarity.

One department reported an initiative that was of particular interest for its comprehensive approach to the issue of mentoring and career advancement for its faculty. Within this

[^10]department, while no current written mentoring policy existed, a new position had been created and an interim Faculty Affairs Committee had been struck with comprehensive responsibility for issues around career support. The Committee and the new position would be responsible for creating guidelines for mentoring and focusing on other issues related to career advancement. The Committee had developed terms of reference for this committee which set out the Committee's purpose, roles and responsibilities, governance, representation and budget portfolio. It may serve as a model for other departments within the FoS.

Faculty members were asked how much formal or informal mentoring they had received in the areas of writing papers, writing grant proposals, teaching, running a lab, committee work and other administrative tasks, leadership roles and networking, obtaining necessary resources/paper work, balancing work and family, and supervising graduate students at UBC (FS Q11). Figure 58 shows that teaching was an area in which faculty had received the greatest amount of mentoring, with $36 \%$ of the total respondents reporting having got "a lot" or "some" mentoring. In contrast, only 7\% of the respondents reported having received "a lot" or "some" mentoring in balancing work and family.

Figure 58:
Perceived amount of received mentoring at UBC


Among departmental groupings, MCS respondents reported having received significantly greater amount of mentoring in committee work and other administrative tasks than PS respondents, with $32 \%$ MCS versus $11 \%$ PS respondents reporting having received "a lot" or "some" mentoring in this regard at UBC (Figure 59).

Figure 59:
Perceived amount of received mentoring in committee work and other administrative tasks: By departmental grouping


Significant gender differences were found in the areas of teaching, balancing work and family, and supervising graduate students, with significantly higher percentages of female respondents than those of males reported having received a lot of or some mentoring (Figure 60).

Figure 60:

## Perceived amount of received mentoring: Gender differences



Amount of mentoring received in balancing work and family: Female


Amount of mentoring received in supervising graduate students: Female



Amount of mentoring received in balancing work and family: Male


Amount of mentoring received in supervising graduate students: Male


Significant differences were also found among respondents by years from obtaining PhD in areas of writing grant proposals, obtaining necessary resources/paper work, and supervising graduate students. In these areas, those faculty members with 7-13 years and/or 14-24 years from PhD reported having received significantly more mentoring than those with more than 25 years from PhD (Figure 61). This pattern may reflect recent trends of increased mentoring for faculty.

Figure 61:
Amount of mentoring received: By years from obtaining PhD


Amount of mentoring received in obtaining necessary resources/paper work


Amount of mentoring received in supervising graduate students


Faculty members were asked to rate how satisfied they were with the amount and quality of informal and formal mentoring provided to them (FS Q12). As shown in Figure 62, the percentages of the total respondents reporting "very satisfied" or "somewhat satisfied" with the amount and quality of informal mentoring they had received were much higher than those giving positive evaluations of the amount and quality of formal mentoring (64\% versus about 30\%).
Figure 62:
Perception of informal and formal mentoring provided


Gender differences existed in the perceptions of the amount and quality of informal and formal mentoring provided (FS Q12). While $10 \%$ to $18 \%$ of the male respondents reported having "mentors available but not needed", no female provided that response in all types of mentoring (Figure 63). Also, 14\% to $40 \%$ of male and females respectively indicated that they were not sure what the questions on amount and quality of formal mentoring meant.
Figure 63:
Satisfaction with informal and formal mentoring: Gender Differences


## 7. BALANCE OF WORK AND PERSONAL LIFE

Regarding family life, faculty members were asked several questions around having children, parental leave, family responsibilities, and access to childcare (FS Q21-26). Department heads were asked about departmental policies and efforts that helped accommodate family responsibilities (HS Q6, 8).

Questions were also asked about faculty members' partner employment and availability of employment assistance to their partners (FS Q17, 18; HS Q13).

### 7.1 Childcare and family Leave

Faculty members were asked to indicate whether they had children and, if so, to report the number of children and the current ages of the youngest and oldest child (FS Q21). Overall, $66 \%$ of the respondents ( 85 out of 129) reported having children; $52 \%$ of females and $70 \%$ of males indicated having children. An average of 1.22 children was reported by the 85 respondents with children. The average ages of the youngest and oldest children were nearly 12 years old and a bit over 15 years old respectively.

Male faculty had a significantly larger number of children than female faculty. Overall, $47 \%$ men, as opposed to $28 \%$ women, reported having two or three children; $48 \%$ of women and $30 \%$ of men had no child. The current ages of children of full professors were significantly higher than those children of assistant professors; faculty with 14-24 years, and 25 and more years from obtaining PhD had significantly older children than those with fewer years from PhD.

As suggested in Figure 64, career considerations had a significantly greater impact on female faculty members’ decision with respect to having children than on males (FS Q26). A significantly higher proportion of assistant professors (42\%) than that of full professors (13\%) reported that career considerations had affected their decisions "a lot". Also, career considerations had significantly greater impact on faculty members from PS than those from LS, with $28 \%$ and $9 \%$ respectively reporting "a lot" of the impact. The impact was more pronounced for professors with 0-6 and 7-13 years from obtaining PhD than for those currently 25 years or more from PhD; career considerations had "a lot" of impact on $27 \%$ assistant professors, $25 \%$ associate professors, and $5 \%$ full professors in their decisions of having children.

Figure 64:
Impact of career considerations on decisions of having children: Group differences


In the Focus Groups, women reported having made conscious choices to put their careers or family on hold. An observation in one department was that 14 out of 15 women were junior tenure track faculty who did not have children.

Faculty members were asked whether they felt UBC had provided adequate access to childcare for their children (FS Q23). Of the 54 respondents with children to whom the question was applicable, $46 \%$ reported that UBC had provided adequate access to childcare. The Focus Groups reported that the lack of adequate on-site daycare was an issue for recruiting.

Figure 65 shows that $47 \%$ female respondents did not feel they UBC had provided adequate access to childcare for their children whereas $31 \%$ male respondents shared the view. While $26 \%$ of the full professors did not perceive adequate access to childcare, $64 \%$ of assistant professors did not see access to childcare as adequate.

Figure 65:

## Perceived adequate access to childcare: Group differences



Faculty members were asked whether they had taken maternity/parental leave in the last five years and, if so, how long the most recent leave was (FS Q24). As shown in Figure 66, a significantly higher percentage of females (53\%) than males (11\%) reported having taken parental leave in the previous five years.

Figure 66:
Percentages of respondents taking maternity/parental leave

Taking maternity/parental leave: female


Taking maternity/parental leave: male


Table 8 suggests that the length of the most recent family leave for the female respondents was overwhelmingly 4-7 months whereas the leave for the male respondents tended to be 1-3 months.

## Table 8: Number of respondents reporting the length of the most recent maternity/parental leave

|  | 1-3 months | 4-7 months | 8-11 months | More than $\mathbf{1 2}$ months |
| :---: | :---: | :---: | :---: | :---: |
| Female |  | 7 |  | 1 |
| Male | 7 |  | 1 |  |

In the Focus Groups, it was recognized that while women and men both shared family responsibilities, the societal expectation placed a greater burden on women.

There were also significant differences among faculty members by years from obtaining PhD in terms of whether they had taken maternity/parental leave in the past five years (FS Q24). Of those who provided a response to the question, $11 \%$ of those with $0-6$ years from obtaining $\mathrm{PhD}, 37 \%$ of those with $7-13$ years from PhD , and $25 \%$ of those with $14-24$ years from PhD took maternity/parental leave over the past five years (Figure 67).
Figure 67:
Taking maternity/parental leave:
Differences by years from obtaining Ph.D.


Faculty members who had taken maternity/parental leave in the last five years were asked to report their responsibilities during the most recent leave (FS Q25). Figure 68 suggests that while taking family leave, $1 / 3$ of the respondents spent "a lot of the time" on research and graduate student supervision, with $44 \%-63 \%$ spending "some time" on administration, research and graduate student supervision, and 6\% taking "some time" on teaching.

Figure 68:
Number of respondents reporting responsibilities during maternity/parental leave


The Focus Groups noted that taking maternity/parental leave had a negative effect on women's careers and that even though 12 month maternity/parental leave was available, it was rarely taken by UBC faculty, but almost always taken by UBC staff. The fact that faculty reported teaching or administrative duties during maternity/parental leave underlines the need for a review of policy ${ }^{19}$. Federal and provincial government guidelines ${ }^{20}$ indicate that it is the responsibility of the employer to maintain the conditions of an employee's position during maternity/parental leave.

Another concern raised in the Focus Groups was the impact of maternity/parental leave on sabbatical leave. In one instance reported, a female faculty took 6 days more than her permitted 6 months maternity leave ${ }^{21}$, which then resulted in her sabbatical being pushed back an entire 6 months.

Department heads were asked whether there was a policy in their department on maternity/parental leave beyond UBC policy (HS Q6). None of the departments reported having other policies than UBC policy on maternity/paternity leave.

In 2004, an ad-hoc group of faculty members from the Faculty of Science, appointed by the Dean and chaired by Dr. Sarah Otto, made some recommendations on parental leave related issues in Report on Parental Leave Policies at $U B C^{22}$. This report may serve as a basis for developing departmental policies on parental leave.

Faculty members reported how many times, in general, departmental events were scheduled to accommodate family care responsibilities (FS Q22). Overall, 27\% and 31\% of the respondents responded with "all the time" and "several times" respectively.

Department heads were asked whether their departments made efforts to avoid conflicts between departmental events and childcare/family care/eldercare responsibilities (HS Q8a). Eight out of the nine departments provided a positive response to the question. Seven departments reported procedures that were perceived as helpful in avoiding such conflicts (HS Q8b). The procedures included scheduling events at mid-day or during regular business hours to accommodate meeting times or events with child care, offering flexibility in choice of course times, closely coordinating with instructors in course scheduling, and canvassing for most convenient times well in advance.

[^11]In the Focus Groups, the issue of accommodations was raised. Some participants shared that they were not supported to observe religious holidays and even refused assistance to make alternative arrangements.

### 7.2 Partner Employment

Faculty members reported how much effort they perceived their departments and UBC had made in assisting to find a faculty position or university appointment for their partners (FS Q17). Of the 40 respondents who reported that the question was of relevance to the question, $48 \%$ and $13 \%$ indicated that their departments and UBC had made "a lot of effort" and "some effort" respectively in helping their partners find employment at UBC. Of those respondents that indicated the question was not applicable, $72 \%$ reported that their partners did not need assistance from UBC.

Also, $20 \%, 16 \%$ and $18 \%$ of those faculty members with $0-6$ years, $7-13$ years, and $14-24$ years from obtaining PhD respectively reported that their departments and UBC made "a lot of effort" to assist partner employment, whereas no faculty members with 25 years and more from PhD shared the same perception (Figure 69).

Figure 69:
Perceptions of efforts on the part of the department and UBC in assisting partner employment: Differences by years from Ph.D.

assistance in finding suitable employment for their partners anywhere in Vancouver (FS Q18), $24 \%$ and $13 \%$ of the respondents relevant to the question indicated "a lot of effort" and "some effort" respectively. Of those respondents to whom the question was not applicable, $88 \%$ reported that their partners did not need assistance from UBC.

Department heads reported whether they assisted candidates/new hires in their departments to find suitable employment anywhere in Vancouver for their partners (HS Q13). Eight out of the nine departments responded with "yes" to the question. The reported steps they took in the assistance were: referring candidates to UBC resources (policy on partner assistance, contracted career placement firms); exploring employment possibilities through
departmental committees, employment agencies or their own contacts; providing temporary academic and administrative employment; and facilitating work permit.

One department reported that they were "very proactive in this regard. For every person who has been offered a job and has raised this issue, we make enquiries through UBC departments, other universities and colleges nearby and other employers in the Lower Mainland. In some cases, we have helped to facilitate employment of partners through the spousal program at UBC."

Some department heads were not aware that some university resources were already available. Further investigation revealed that in the late 1990’s the Senior Faculty Opportunity Fund enabled departments to appoint at senior ranks women and minorities with exceptional qualifications (UBC Equity Office annual reports 1995-1999). At least two department heads recommended that UBC have an office and funds to support departments in addressing spousal issues.

When asked about their partners' current employment status (FS Q19), 61\% of those respondents with a partner reported that their partners were currently employed full time and $20 \%$ indicated "part time". A higher percentage of males than females ( $21 \%$ versus $3 \%$ ) reported that their partners were not currently employed. A higher percentage of females than males ( $62 \%$ versus $51 \%$ ) indicated that their partners were employed full time (Figure 70).

Figure 70:

## Partner employment status: Gender difference

Partner employment status: Female


Partner employment status: Male

$\square$ Yes/fulltime
$\square$ Yes/partime $\square$ No
$\square$ Not applicable

The Focus Groups recommended that a specific resource person be appointed to deal with immigration matters for new hires.

UBC Human Resources reported that departments were repeatedly being asked by job candidates to provide spousal/partner career assistance. ${ }^{23}$ The Trek 2000 and Trek 2010 documents both refer to eventual implementation of a "spousal job placement program." The Trek 2000 document specified targets in the recruitment and retention of faculty and staff that included implementation of a spousal job placement program by summer in $1999 .{ }^{24}$

[^12]The Trek 2010 document, however, has dropped this issue from its list of recruitment and retentions goals. ${ }^{25}$ The Vice-President, Research, simply directs new recruits to contact their department head/director for spousal job placement assistance. ${ }^{26}$ Thus, to date, each unit or department appears to have its own policies, and no general UBC program is in place-particularly when it comes to spouses seeking employment outside of UBC. If UBC is to remain competitive with top universities in Canada and abroad, a central and uniform policy would be of great help.

[^13]
## Appendix

Demographic information about total faculty of FoS, total survey respondents, and Focus Group participants is shown in Figures 1, 2 and Table 1.

Figure 1:
Total faculty, total survey respondents, and focus group participants:
By gender, departmental grouping and rank


Figure 2:
Total faculty and total survey respondents by ethnicity

Total faculty by ethnicity: 2006



Total survey respondents by ethnicity


| $\square$ Chinese |
| :--- | :--- |
| $\square$ Japanese |
| $\square$ Latin American |
| $\square$ South Asian |
| $\square$ Caucasian |
| $\square$ Mixed/other |

Note: Total faculty ethnicity data courtesy of UBC Equity Office


[^0]:    ${ }^{1}$ A 35-page Main Findings report and Executive Summary (including major recommendations of the Assessment Task Force) can be found at the UBC Science website (http://science.ubc.ca/faculty/diversity).
    ${ }^{2}$ The Advisory Committee was initially chaired by then Associate Dean Grant Ingram (now CFIS) and later by Anne Condon and then Rachel Kuske. External members of the Advisory Committee were Joan Girgus, Princeton, Jo Handlesman, UW-Madison, and Geri Richmond, U Oregon.
    ${ }^{3}$ The on-line faculty survey and heads questionnaire can be accessed at http://science.ubc.ca/faculty/diversity.
    ${ }^{4}$ The Working Group included: Kathie Nomme (Depts. of Botany and Zoology), Suzana Straus (Dept. of Chemistry), Tamara Munzner (Dept. of Computer Science), Maya Kopylova (Dept. of Earth \& Ocean Sciences), Leah Keshet and Jim Bryan (Dept. of Mathematics), Pauline Johnson (Dept. of Microbiology \& Immunology), Vesna Sossi (Dept. of Physics \& Astronomy), Jane Roskams (Dept. of Zoology).
    ${ }^{5}$ The survey consultant was Dr. Catherine Sabiston, McGill University, Faculty of Education (Dept. of Kinesiology \& Physical Education) and the survey advisor was Dr. Wendy Frisby, UBC, Faculty of Education (School of Human Kinetics).
    ${ }^{6}$ Report consultants were Rosalind Currie and Qin Liu, with technical and administrative assistance from Ricky Cheng and Trina Ojo.
    ${ }^{7}$ The Focus Group coordinators were Lori Charvat and Maura Da Cruz, with administrative assistance from Wynnie Lau.

[^1]:    ${ }^{8}$ The documents can be found at http://science.ubc.ca/faculty/diversity.

[^2]:    ${ }^{9}$ Essentially NSERC (The Natural Sciences and Engineering Research Council of Canada), CIHR (Canadian Institutes of Health Research) and SSHRC (The Social Sciences and Humanities Research Council), with CRC (Canada’s Communications Research Centre) and NCE (the Networks of Centres of Excellence) as related branches.

[^3]:    ${ }^{10} \mathrm{http}: / / w w w . n s e r c . g c . c a / s f \_e . a s p ? n a v=s f n a v \& l b i=c 7$. NSERC program supporting hiring and retention of women and aboriginal researchers.

[^4]:    ${ }^{11}$ The "two-body" problem refers to the necessity of partner employment, e.g. in the case of a new hire.
    ${ }^{12}$ The roles of SAC can be found "Senate Policy Abstracts" at http://www.students.ubc.ca/senate/policies.cfm?ID=19

[^5]:    ${ }^{13}$ These documents can be found at http://www.equity.ubc.ca/brochures/index.htm.

[^6]:    ${ }^{14}$ Due to a very small number of female full professors in the nine departments (only 5), this finding needs to be viewed with caution. The breakdown by department grouping is not included in Table 4, due to these small numbers.

[^7]:    ${ }^{15}$ The percentage of those indicating "no discrimination" is not reported in this chart.

[^8]:    ${ }^{16}$ The definition of "harassment" used in the Faculty Survey, i.e., "physical, visual or verbal behaviour directed against a person for which there is no bona fide and reasonable justification according to the UBC Equity Policy" (see www.equity.ubc.ca), is only a partial definition of the UBC Harassment Policy because it leaves out a discussion of personal harassment, which is not covered under the BC Human Rights Code in the UBC policy. This means that some respondents may have reported personal harassment which is not covered by the BC Human Rights Code.

[^9]:    ${ }^{17}$ The percentage of those indicating "no harassment" is not presented in this figure.

[^10]:    ${ }^{18}$ The definitions of "formal mentor" and "informal mentor" were indicated in the questionnaire. "Formal mentor" was defined as "individual, as assigned by your department (or head designate), identified as someone you can meet with on a regular basis." "Informal mentor" was "individual, not assigned to you by your department, who you consult (or could consult) with on a regular basis.

[^11]:    ${ }^{19}$ Top ups for maternity/parental leave (Supplemental Unemployment Benefits, known as SUB plan, see http://www.hr.ubc.ca/faculty_relations/agreements/loa.html) come from a separate university fund and are not from the departments. Departments keep all the funds from a person's salary while on leave and the use of these funds is at the head's discretion.
    ${ }^{20}$ The guidelines can be found at
    http://www.hrsdc.gc.ca/en/ei/application/right_responsibilities.shtml
    http://www.labour.gov.bc.ca/esb/igm/esa-part-6/igm-esa-s-54.htm)
    ${ }^{21}$ Current federal regulations allow for twelve months of maternity/parental leave.
    ${ }^{22}$ The document can be found at http://science.ubc.ca/faculty/diversity

[^12]:    ${ }^{23}$ The document of Reinventing Recruitment, Hiring \& Orientation at the University of British Columbia can be found at www.hr.ubc.ca/files/pdf/bpr/report_17sep2004.pdf
    ${ }^{24} \mathrm{http}: / / \mathrm{www} . t r e k 2000 . \mathrm{ubc} . \mathrm{ca} /$ targets/1999.html

[^13]:    ${ }^{25}$ http://www.trek2000.ubc.ca/targets/index.html
    ${ }^{26} \mathrm{http}: / /$ www.research.ubc.ca/FacultyBefore.aspx

