## Memorandum

TO: David Barnard, President, University of Manitoba and Janet Morrill, President,

FROM: Janice Dodd, Susan Prentice and Tracey Peter, Co-Chairs
DATE: April 3, 2019
Re: $\quad$ Report of the Joint Committee on Gender-Based Salary Differentials

Please accept this report and the accompanying Schirle Report (Jan 30, 2019) on behalf of the Joint Committee on Gender-Based Salary Differentials. Details about our work process are contained in Appendix 1 and a background report is Appendix 2.

Dr. Schirle's report shows that, at a very high level, "average male and female salaries are very different" (p. 1) at the University of Manitoba (see Figure 1).

Figure 1
Salary distributions for tenure-stream members and instructors


Source: Schirle report, p. 2

## Salaries

Among tenure-track faculty, Dr. Schirle finds no evidence of a systemic gender-based salary differential after controlling for key salary determinants. Her report observes that the salary structure of thresholds and maxima create wage compression within each rank and in particular at the highest rank, and this has the effect of compressing any salary differentials that might be the result of different starting salaries or wage progression over a career (p. 5).

In analyzing instructor salaries, Dr. Schirle's observes the estimates "suggest a gendered wage gap whereby women are paid less" (p. 3). Because these calculations are based a small number of members, the gap does not rise to a threshold of mathematical significance. Given that the salary data can be considered both as a census and as a sample, we are not fully persuaded that sex gaps must only be addressed when P values cross a significance threshold. As a committee, we believe that this gap requires further investigation, likely of a qualitative nature

## Employment Equity

In the course of analyzing salaries, Dr. Schirle's report raises employment equity related concerns about factors that may influence faculty salaries at the University of Manitoba.
(1) Time to promotion analysis demonstrates that there is a statistically significant differential in time to promotion to Full Professor between female and male faculty. See figure 2, below. Dr. Schirle writes that women take "longer to be promoted to Professor, by just over one year" (p. 7). The report explains that this time gap could result in "small differences in salary that would be impossible in this context to measure separately from rank and years in rank" (p. 7). We agree with her observation that "the source of the gender differences in time before promotion requires further study" (p. 7).

Figure 2
Years in UMFA before promotion to Professor


Source: Schirle report, p. 6
(2) The likelihood of becoming promoted to Professor varies between women and men. Dr.

Schirle writes that "Overall, it appears high seniority women are less likely to be Professors" (p.
9). She finds that from Year 12 onward, women are 15.5 per cent less likely than men to hold the rank of Full Professor. As a committee, we agree with Schirle that a "qualitative study of individual cases of high seniority men and women who have not moved to promotion may be warranted" (p. 9). We further agree with the suggestions that such research should address climate-type factors, including the treatment of service activities and incentives for types of work done by Associate professors (p. 9).
(3) Women and men vary in the number of years since degree completion before promotion to Professor. The report finds that "it appears that overall, while men may be moving through the ranks more quickly after arriving at the University of Manitoba, they appear to have done so in part because they have put in time developing their careers elsewhere first." (p. 7). We suggest an investigation into hiring of early career faculty is warranted based on these findings.
(4) Discipline-specific and campus-specific variations are observed. The report notes that while all women are less likely to be promoted to Professor at year 12 and onward, the lower likelihood is particularly pronounced at Bannatyne, as well as in Science and Engineering (p. 9).
(5) Characteristics of female and male faculty members tend to differ. Schirle writes that "Women tend to dominate in lower ranks, have less seniority, and tend to segregate into different disciplines than men" (p.1). The report acknowledges that many factors outside the university's control shape this distribution but that some of this differential can be "systemic to the university." (p. 26).
(6) Employment rates of women and men beyond the normal retirement age differ for women and men. Schirle observes that "Among tenure stream faculty, the men are surprisingly older, and there is a significant portion of men over age 70 (about 8\%) (p. 10). The University seems to be an attractive place to work for many senior men but much less so for senior women. As a committee, we believe this requires further scrutiny

## Discussion

Significant employment equity issues are raised by these six findings. They merit further study including: the lag in promotion of women to Professor relative to men and differential rates of promotion to Professor across the University, and which are especially low for women at the Bannatyne campus. There is concern that women disproportionately take longer or are never promoted to the rank of Professor, perhaps because of different expectations of teaching and service, among other career determinants. Qualitative and/or survey research approaches might provide insight into whether women are differentially required to perform service and related activities, which are conventionally less valued in our promotion guidelines. Recent work by two of our Committee members, Dr. Peter and Dr. Farenhorst, find that female faculty are disproportionately responsible for more teaching and service, including the emotional labour of student advising. Hiring decisions and starting salaries remain important; career paths for men and women may differ significantly, as the average time from degree and time at UM data seem to demonstrate. The 'second hump' in the data for men's salaries indicates a disproportionate number of men continue to work past traditional retirement age. What makes UM an attractive place to work for many senior men but not for senior women? This requires further scrutiny.

As a committee, we strongly suspect that the slower rate of promotion to Professor and the lower likelihood of women holding the rank of Professor are likely to generate lower career life-time earnings for women. This would be reflected in annual pension contributions and income in retirement. It would be useful to investigate lifetime earnings and pension accounts to assess if this hypothesis is correct.

The data reveal that the representation of women and men remains strikingly unequal in many Faculties and departments, even among relatively junior ranks. While the full academic pipeline is not within the University's control, under-representation is nevertheless concerning.

Now that the salary data set is 'clean' and algorithms are established to scrutinize salaries for gender-based inequities, we recommend an annual review with a written report to the University community and UMFA at least once every five years.

The Joint Committee worked well together and acknowledges with grateful thanks the particular support of Gregory Juliano and the Human Resources office for financial support for the Consultants and Tamara Edkins, the Research Assistant, as well as provision of data.

## RECOMMENDATIONS

We summarize our recommendations, which focus on how employment practices and employment equity concerns may have effects on salary equity:

1. We recommend an annual scrutiny of faculty salaries, using ORS, Blinder-Oaxaca and multilevel modelling and other sources of information, including exit interviews (see
Recommendation 7), with a written report to the University community and UMFA at least once every five years;
2. We recommend qualitative study of male and female instructor salaries, where evidence suggests sex-based salary gaps;
3. We recommend further study into career progression at the University to understand why women are 15.5 percent less likely than men to be Full Professors at year 12 and onward;
4. We recommend qualitative and survey research into male and female workloads, in under to understand both women's slower career progress and marked differences in employment past age 65 , as well as other climate-related issues;
5. We recommend study into a different dimension of possible salary inequity, namely gaps in members' pension fund accounts, which may affect income in retirement;
6. We recommend more sustained and resourced efforts to ensure equity in faculty hiring, given that women remain under-represented in many disciplines and faculties.
7. We recommend exit interviews when faculty resign or retire, in order to assess how climate and related factors may impact recruitment, retention, and career progress. Data from such exit interviews should be integrated into public reporting (under Recommendation No. 1).

Respectfully submitted,
Joint Committee Members
Janice Dodd
Annemieke Farenhorst
Susan Prentice
Dave Muir
Tracey Peter
Tina Chen

## Reports appended and approved by the Committee

Schirle, T. (January 30, 2019) Study of Gender-based Salary Differentials at the University of Manitoba: Final report

Appendix 1: History of the work of the Committee and Consultants
Appendix 2: Tamara Edkins, "Methodological Review: Sex/Salary Studies at Post-Secondary Institutions"

Background document, not approved by the Committee
Appendix 3: Tristat Report 2018

