Dean's Committee on Women in Leadership

Report and Recommendations

October 27, 2015

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1. Committee Membership

Sharon Allen, MD, Family Medicine Community Health Lynne Bemis, PhD, Duluth, Biomedical Sciences Peter Bitterman, MD, Medicine Linda Carson, MD, Obstetrics & Gynecology Bobbi Daniels, MD, Medicine Scott Dehm, PhD, Laboratory Medicine & Pathology *Timothy Ebner, PhD, Neuroscience* Melissa Geller, MD, Obstetrics & Gynecology Anne Joseph (Co-Chair), MD, Medicine Erik van Kuijk, MD, PhD, Ophthalmology and Visual Neurosciences Carol Lange (Co-Chair), PhD, Medicine Robin Michaels, PhD, Duluth, Biomedical Sciences Kerri Miller, MA, Office of Faculty Affairs Nancy Raymond, MD, Psychiatry Elizabeth Seaquist, MD, Medicine Jill Siegfried, PhD, Pharmacology Paula Termuhlen, MD, Duluth, Regional Campus Dean

2. Executive Summary

Women are under-represented in leadership roles in US medical schools, including the University of Minnesota Medical School. Structural barriers include unconscious gender bias and cultural expectations that differ for men and women. Evidence shows, however, that including women in leadership roles fosters institutional success. It is therefore imperative that we actively recruit and retain women faculty leaders. The full inclusion of women at all levels of academic leadership is a vital requirement for achieving our goal of being a world-class medical school. There are specific actions that must be taken to increase the proportion of women in leadership positions, and ensure a rich pipeline of women will enter leadership positions. To achieve this, the Medical School must set specific quantifiable goals, show commitment to those goals by providing the resources needed to accomplish them, be flexible in establishing criteria for selecting leaders to build an institutional culture that promotes women in leadership roles and ensure that a broader pool of applicants is qualified. The following recommendations represent evidence-based best practices regarding leadership, education, recruitment, mentorship, retention, salary equity, and metrics for evaluation. For effective implementation, a top-down effort is needed that demonstrates the commitment of the Medical School leadership to recruiting and enabling women faculty leaders.

Recommendations

A. Leadership and Education

- (1) Recruit new senior and mid-career women faculty to the Medical School.
- (2) Appoint women to all types of leadership positions including but not limited to: division and department chairs, associate and vice dean positions, endowed professorships and chairs, and committee chairs.
- (3) Ensure equal promotion rates for men and women faculty to Associate Professor and Professor, so the pipeline of potential female leaders increases. This should occur by preparing women to be promoted.
- (4) Provide unconscious bias training to men and women faculty.
- (5) Provide resources to existing female leaders to facilitate their ability to serve as role models and overcome obstacles to success.
- (6) Increase exposure of faculty to female role models in Grand Rounds and invited lectures.

B. Faculty Recruitment, Mentorship, and Retention

- (7) Develop and implement a hiring process for use throughout the Medical School that enhances ability to successfully recruit women.
- (8) Provide comprehensive mentoring in an environment that supports academic success and development of essential qualifications for leadership for women.
- (9) Determine the reasons faculty at the Assistant and Associate Professor levels leave the University of Minnesota so that retention barriers can be addressed.

C. Salary Equity

- (10) Salary and start-up packages for new hires should include a comparison to other recently hired comparable faculty. For women the comparison group should be men.
- (11) Conduct annual Medical School salary equity studies and disseminate de-identified results.
- (12) Commit to salary equity and correct salary disparities.

D. Metrics and Evaluation

- (13) Build and annually monitor a database that includes variables known to be important to faculty success and leadership, including promotion, salary, number of women in leadership roles, turnover, and reasons for turnover.
- (14) Disseminate data regarding rank and leadership roles widely to faculty and leadership to promote advancement of women faculty; develop a plan to address areas of concern.
- (15) Widen evaluation criteria for Deans, Department Chairs, Division Chairs and Center Directors to include annual progress on recruitment of women faculty, appointment of women to leadership positions, retention and promotion of women faculty, and salary equity.

E. Infrastructure Recommendations

- (16) Establish a standing committee to help implement and advise the Dean's office on the topic of creating gender equity, including inviting external speakers and external evaluation of progress toward goals.
- (17) Resources will be needed to help the University of Minnesota Medical School implement best practices to support women in leadership.

3. Background

Introduction

The Committee noted the pronounced under-representation of women in leadership roles at the University of Minnesota (see Table 1).

	Female n (%)	Males n (%)	Total
Assistant Professors	286 (51)	270 (49)	556
Associate Professors	74 (32)	157 (68)	231
Full Professors	67 (23)	229 (77)	296
Endowed Professors	9 (31)	20 (69)	29
Endowed Chairs	10 (12)	71 (88)	81
Deans/Vice Deans	2 (25)	6 (75)	8
Department Chairs	7 (25)	21 (75)	28
Major Committee Chairs*	4 (36)	7 (64)	11
Open Leadership Search Chairs**	0 (0)	4 (100)	4

Table 1. Women in leadership roles at UMN Medical School

* Admissions Committee, Duluth Admissions Committee, Basic Sciences Council, Clinical Sciences Council, Committee on Student Scholastic Standing, Duluth Committee on Student Scholastic Standing, Department Heads Council, Education Council, Faculty Advisory Council, MD/PhD Admissions Committee, Research Council

** Associate Dean - Faculty Affairs, Associate Dean - Undergraduate Medical Education, Department Head -Neurosurgery, Department Head - Psychiatry

To develop an evidence-based set of recommendations, we reviewed documented barriers to achievement of women faculty and best practices for developing female leaders described in the literature.

Leadership and Education

Women continue to be under-represented in leadership roles in US medical schools. The University of Minnesota is no exception. Below, we present an evidence-based review of the primary issues that contribute to gender inequity with regard to leadership to inform our recommendations for addressing the major challenges.

Jena et al present current and disturbing data in a recent article in JAMA.¹ The proportion of women at the rank of full professor in US medical schools has been stagnant since 1980. They report a lower number of publications, less NIH funding, and lower clinical trial registration numbers for women compared to men. Women were considerably less likely than men to advance to the rank of full professor across specialties, after accounting for measures of research productivity.¹

A consistent finding from the peer-reviewed literature examining gender differences in career advancement is the strong role of unconscious gender bias.²⁻⁴ Ingrained expectations of how

women should behave compared to men, and how they are perceived compared to men (held by men and women alike) create barriers that disadvantage women in hiring,²⁻⁴ promotion,^{4,5} and selection for leadership roles⁶ in academic medicine. Examples of these biases include *unequal* evaluation of academic credentials in female compared to male candidates, women's experience and accomplishments being systematically under-appreciated;²⁻⁴ unequal evaluation of the *performance* of women,^{4,7} female on-the-job performance being negatively evaluated based on a perceived inconsistency with a feminine ideal;^{3, 8} and *unequal compensation*, women being at a disadvantage compared to men in initial salary offers and in subsequent raises,^{2,9} a trend which has increased, rather than decreased, over the past 15 years.¹⁰ These factors lead to a consistent under-valuing of the contributions of women to science and medicine. While overt discrimination has clearly declined with the increase of women in science and medicine, unconscious bias against women who excel in positions traditionally viewed as male-specific⁸ appears a main driver of current inequities,¹¹ with gender bias found among women as well as men.^{2, 3, 8} Women perceived as successful in male-dominated work spheres receive lower support for promotion and salary increases, and are viewed with hostility by both women and men, while equally successful men are strongly supported and viewed positively.^{8, 12}

Cultural expectations of how women should behave compared to men, and ingrained assumptions of fitness of each gender for challenging academic careers and leadership roles affect all medical faculty since these expectations are deep-rooted in society.¹³ The concept of an authority figure is culturally associated with males but not females,¹⁴ and the word "leader" itself confers a male bias that is easily activated and affects evaluations.¹⁵ Use of the term "leader" as an explicit requirement for tenure showed a bias against conferral of tenure to women in top US medical schools, while no bias was observed when specific *characteristics* of leadership, such as evidence of independent publications, were given as tenure requirements.⁵ Women make up an increasing proportion of medical and graduate students, post-doctoral fellows, and junior faculty, a trend that is likely to continue. The President's Council of Advisors on Science and Technology recommended increased training and retention of women as a key means to close the projected workforce gap in Science, Technology, Engineering and Mathematics (STEM) fields over the next 10 years.¹⁶ Women represent a significant investment of training resources that, if under-utilized, reduces the value of these institutional investments and decreases the societal benefit of national funding for science and medicine.

The importance of increasing female leadership is further evidenced by studies showing that companies with more female leaders are more successful. For example, higher financial performance has been attributed to the proportion of women in leadership roles.¹⁷ An important component of success for companies was the placement of women in all levels of leadership, not just in the corporate suite.¹⁷ Women given leadership opportunities are equally effective compared to men,¹⁷ and in a 2012 study reported by the *Harvard Business Review*, business leaders ranked female managers higher than males in total leadership strength.¹⁸ Underrepresentation of women in leadership roles in medical schools is thus a <u>missed opportunity</u> for advancement. The full inclusion of women is a vital requirement for achieving our goal of being a world-class medical school. Full inclusion is highly dependent on acknowledging and confronting unconscious gender bias, and in proactive measures to recruit and retain women faculty. Such initiatives will provide equal opportunity for women in academic medicine. The requirement for equal treatment regardless of gender, with recognition of the damaging impact of

unconscious bias, is a principle that must be fully embraced by all men and women at the University of Minnesota Medical School. <u>It is detrimental to relegate discussion of this topic</u> only to meetings of the women faculty.

Faculty Recruitment, Mentorship, and Retention

Women have comprised approximately 50% of the entry classes into United States medical schools since approximately 2000, but the number of women in the highest levels of leadership in academic medicine has remained essentially unchanged for 20 years. Since 2005 an equal number of men and women have been hired as Assistant Professors, but the number of women who are promoted to higher ranks falls significantly behind the number of male faculty members. For all first time Assistant Professors hired by medical schools in the United States in 2003-2004, the 10-year promotion rate for women was 31% as compared to 37% for men.¹⁹ The lower rate of promotion for women decreases the pool of women who have the experience necessary to become leaders at a medical school. Only 16% of medical school deans were women in 2013-14, a meager increase from 10% in 2003-4.¹⁹

It is critical to recruit senior women faculty to help address this gap in the Medical School. Medical schools often look outside their walls for talented individuals to assume leadership positions. The process used to identify potential leaders and recruit them to a new position is often susceptible to gender bias. In the literature, it has been repeatedly shown that academic credentials are often rated higher if the name on the curriculum vitae is obviously male as opposed to obviously female.² Consequently, to increase the number of women leaders in academic medicine will require a change in how new leaders are recruited to medical schools.

Failure to retain women faculty members is another important issue. To increase the number of women leaders in academic medicine will require a change in how women are retained as faculty members and promoted over time. To understand retention, it is important to identify the reasons why faculty leave their positions in the first place.²⁰

Retention is influenced by faculty perception of the values and rewards of an institution. Studies have shown that there are significant differences in job satisfaction rates for men and women.²¹ Equally alarming is that minority faculty are more likely to leave their institution after five years compared to white faculty.²² The cost to an institution, both in monetary terms and in reputation, is significant when faculty turnover is high.²³ Some schools have taken aggressive steps to survey their faculty to identify areas of job dissatisfaction in order to try to intervene and prevent faculty loss. One school reported as much as a 550% increase in promotion and retention rate of women over a 5 year period after addressing gender salary inequities, increasing the number of women promoted to higher positions, developing mentoring and networking opportunities, and educating faculty about gender discrimination.²³ This work was published in 1996. Almost 20 years later, nearly identical problems still exist at many institutions that contribute to women faculty attrition (lack of career and professional advancement, lack of mentoring programs, lack of time to do scholarship, salary inequity, and lack of leadership recognition and support for faculty). Sadly, one school reported an attrition rate of 33% of faculty leaving positions within 3 years of hire.²⁴ Evidence therefore suggests that this should influence action items at our own institution.

Salary Equity

There are well-documented disparities in salary between males and females in both business and academics.²⁵ In 2012, the median income for females in the United States was 77.1% of the median income for males, unadjusted for occupation or other factors.²⁵ A study of 50 universities showed that after control for professional characteristics and productivity, female researchers in the life sciences earned an average of \$13,226 less per year than men.⁹

Salary differences by gender persist for faculty in academic health centers: a 2012 U.S. study of physician researchers found the unadjusted mean salary for female physician researchers was 84.2% of male physician researchers' salary. After adjusting for differences in specialty, institutional characteristics, academic productivity, academic rank, work hours, and other factors, the mean salary for female physician researchers remained \$13,399 lower (91.9%) of male physician researchers.²⁶ The University of Arizona used a different method, i.e. comparison to individuals within the same department, to adjust salaries. The average salary increase for women was \$17,323.²⁷ A 2009 analysis at the University of Colorado's Department of Pediatrics concluded that a salary gap for females, adjusting for years at rank and subspecialty, ranged from \$8,000 for "low-earning specialties" to \$16,500 for "high earning specialties"; differences also depended on rank.²⁸ A 2004 study of 1,814 full time U.S. Medical School faculty in 24 randomly selected medical schools found that female physician faculty earned an average of \$11,691 less than comparable male faculty.²⁹

<u>Disseminating data about the gender gap in pay is critical</u>. A recent article in the New York Times describes the momentum created by policy initiatives to require companies to publicly report the gender gap in pay in Britain, Belgium, and Austria, and evidence that this practice improves employee loyalty and decreases turnover.³⁰ <u>Continuous monitoring is critical, because</u> <u>data suggests that one-time salary adjustments are an inadequate intervention</u>. One study suggests salary differences between men and women appear to be growing over time. In 2008 in New York State, newly trained male physicians made on average \$16,819 more than newly trained female physicians, compared to a \$3,600 difference in 1999.¹⁰

Metrics Evaluation and Data Collection

There is ample documentation of under-representation of women in leadership roles in medical schools.^{19, 28} For example, national data from the Association of Medical Colleges (AAMC) show that although 38% of faculty are women, only 21% of faculty hold the rank of Professor and 4% of Department Chairs in medical schools are women.¹⁹ Sixteen percent of Medical School Deans were women in 2013-14, with only modest progress made since 2003-4 (10%).¹⁹ AAMC provides useful benchmark data for very US medical school on the important parameters of number of new women hires, departures, rank, promotion, leadership roles, and resources. There is considerable variability by Department and institution. Table 2 shows a comparison between the University of Minnesota and national averages.

	UMN	2013 Average
Women new hires	54%	46%
Women departures/total women faculty	6%	8%
% Women Full Professors	12%	15%
% Women tenured	21%	12%
New tenures	23%	31%
Promotions to Associate Professor	25%	41%
Promotions to Full Professor	21%	34%
Permanent Division/Section Chiefs	32%	30%
Permanent Department Chairs	18%	16%
Resources to support women faculty	\$25,000	\$101,567

Table 2. Comparison of UMN Medical School to AAMC 2013 benchmarks.

It is impossible to assess needs, evaluate interventions, and measure progress toward inclusion of women in Medical School leadership without continuous data monitoring and evaluation.

4. Recommendations

A. Leadership and Education

The University of Minnesota Medical School can become a vanguard in achieving greater academic success for women and equitable representation of women in leadership by committing to the recruitment of senior women faculty to the Medical School to serve as role models. Actions should include appointment of women to all types of leadership positions; providing training to all faculty that raises awareness of unconscious bias and embraces corrective measures across the Medical School as a means of reducing gender inequalities and working to ensure equal promotion rates for men and women faculty to Associate Professor and Professor, so the pipeline of potential female leaders increases.

These goals can be achieved through the following Action Plan:

- (1) **Recruitment of senior and mid-career women faculty:** 20 new female Professors and 30 new female Associate Professors in the Clinical and Basic Sciences should be recruited to the Medical School over the next 7 years. This can be accomplished either through on-going recruitment efforts such as the Medical Discovery Teams and already planned department expansions, or through special recruitment efforts for the purpose of achieving more gender equity in the Medical School.
- (2) Appointment of women to leadership positions: Women should make up 40% of academic /medical leadership in the Medical School by 2023, a doubling of the current 20% of Deans, Regional Deans, Clinical and Basic Science Department Heads, and Vice-Deans. A further goal is to expand to 40% by 2023 the female representation of Directors and Associate Directors of Centers and Institutes, Core Directors of Centers and Institutes, Vice-Chairs of Departments, Endowed Chairs and Professorships, Chairs of Search Committees for leadership positions and departmental recruitments, and other positions of influence within the Medical School. This goal can be accomplished by educating the faculty about the advantages to the institution of including more women in these roles, by rotating leadership positions, by Medical School leadership embracing this goal. The Medical School should also encourage leadership training for women and provide financial support/stipends to offset educational costs and enable participation of women faculty at all levels. Junior faculty in particular should be encouraged to enter the pipeline towards leadership. The Medical School should develop new ways to recognize the achievements of junior faculty members to enable this process.

The Medical School should provide a list of women interested in participation on committees as Chairs and other influential persons (Center and Division Directors) to individuals who routinely nominate faculty for University service. Appointment of women to such positions should be a metric under criteria of annual review for all faculty holding leadership positions (Deans, Chairs, Center and Division Directors, etc.) within the Medical School (see Recommendation 17). An important aspect of this goal is increased invitation of women who are junior faculty to shadow or participate as new committee members so that they are exposed to women Chairs as role models and gain experience early in their careers.

- (3) **Prioritize equal rates of promotion:** Set a goal of equal rates of promotion in academic rank for male and female faculty members, and engage department heads and mentoring committees in prioritizing this goal.
- (4) **Educate about unconscious bias:** Incorporating education about unconscious bias and efforts to reduce unconscious bias into the fabric of the Medical School. This can be accomplished by mandating education and training routinely to new faculty, newly appointed leaders, training grant directors and trainees, search committees, and existing medical school leadership. Appropriate CME credits for this training will encourage participation.
- (5) **Provide resources to existing female leaders to facilitate their ability to serve as role models and overcome obstacles to success**. The relatively small number of senior women faculty in the Medical School would benefit from financial support, including Chairs and Professorships, professional development such as coaching, and increased administrative support to further career advancement.
- (6) **Increase exposure of faculty to female role models:** The Medical School should increase exposure of the faculty to female role models in Grand Rounds and other invited lectures by mandating that all seminar and lecture series (including any regular focused educational and programmatic events) include at least 33% women speakers (external invited faculty and internal faculty).

B. Faculty Recruitment, Mentoring, and Retention

The University of Minnesota Medical School can improve recruitment and retention of women faculty by developing and implementing hiring processes to support recruiting women, establishing comprehensive mentoring programs that focus on leadership development in an environment that supports academic success and retention, and determining the reasons faculty at the assistant and associate professor level leave.

These goals can be achieved through the following Action Plan:

(7) **Change hiring processes:** Women should be equally represented as Search Committee Chairs and members for both external and internal searches. There should be a requirement for all search committees to have one or more female members and require all members to attend training in the recognition and management of unconscious bias. The Medical School should institute a search process that minimizes bias, including recommendations of the AAMC: "Seven fresh ideas to help searches for academic leaders succeed."³¹ Some examples of these best practices are preparing for recruitment by carefully identifying key characteristics, having recruitment "ambassadors", engaging deans and leadership in proactive outreach to candidates, and providing "high touch service". Every search committee, when possible, should include a female candidate in their top three choices. This process should be implemented immediately to coincide with the recruitment of new Medical Discovery Teams.

- (8) Provide comprehensive mentoring and development of essential qualifications for leadership for women: Department leadership should create an environment and culture of support for the faculty. Transparency, inclusiveness, open communication, and faculty career development opportunities and recognition for excellence all contribute to such an environment. Departmental leadership must provide junior faculty with clear and realistic expectations for advancement at the time of hiring. Junior faculty must have assigned mentors and departmental leaders must ensure that mentoring sessions occur and are documented. All mentors should attend regular training sessions in the recognition and management of unconscious bias. Mentoring sessions should include discussions about local and national networking opportunities. Comprehensive mentoring programs should include significant focus on the topic of leadership development and encourage junior faculty participation in activities that promote advancement of leadership experience (including committee service), in addition to fostering the academic productivity that is an essential qualification for leadership. <u>A full range of activities including mentor training, mentoring for mid-career faculty, and sponsorship is required</u>.
- (9) Measure job satisfaction and determine the reasons why faculty at the Assistant and Associate Professor level have left the University of Minnesota Medical School by performing mandatory telephone survey and/or exit interviews: The Medical School should create and distribute a web-based, anonymous survey to a defined cohort of Medical School faculty. The survey should address demographics (race, gender, ethnicity), rank and tenure status, degree and department. Questions should also address faculty activities/responsibilities and institutional support for activities/responsibilities. Current faculty should be asked about job satisfaction and whether they are planning to leave the institution over the next 5 years and why.

Day care and sick child care are critical issues for young faculty. The Medical School should work with the University to provide easy access to day care at or near University for faculty members, although clinical demands on faculty in the Medical School create unique needs for daycare coverage. Good access to high quality daycare will be a competitive recruitment tool.

Former faculty should have structured telephone interviews to address factors (personal and professional) that influenced their decision to leave. Space should be given for faculty to provide additional comments. The Medical School should develop a retention strategy that addresses the challenges identified through the faculty survey, with emphasis on issues identified as more prevalent for female faculty members.

C. Salary Equity

The Medical School should provide equal salaries for male and female faculty with similar qualifications. Salary equity should be regularly assessed, and if there are disparities in compensation they should be corrected. These goals can be accomplished by conducting a salary equity study and disseminating results, correcting salary disparities, monitoring salary equity in

an ongoing fashion, and providing an opportunity for salary negotiation during the annual review process.

These goals can be achieved through the following Action Plan:

- (10) Salary and start-up packages for new hires should include a comparison to other recently hired comparable faculty. For women the comparison group should be men.
- (11) The Medical School should conduct annual salary equity studies, using a multivariate model to account for differences in achievement. This standard has been applied to all other faculty at the University of Minnesota except for the Medical School. Salary analysis will be best achieved through contracting with outside experts, which will require investment of resources. In addition, salaries can be compared to AAMC national data. It may also be necessary to establish a system to compare women faculty salaries to comparable male faculty. <u>Salary must be monitored for all faculty at regular intervals to prevent backward "slippage."</u> Salary negotiation should be a part of the regular faculty annual review process to provide equal opportunity for advancement in compensation to men and women.
- (12) **Salary disparities must be corrected**. This will likely require additional resources from the Medical School.

D. Metrics and Evaluation

University of Minnesota faculty data, current and ongoing, are necessary to describe our position, compare it to other institutions and national data, set goals, and evaluate progress toward those goals. These include a broad set of metrics including variables known to be important to faculty success and leadership. Metrics should be continuously monitored, and the data should be widely disseminated to faculty and leadership to promote advancement of women faculty.

These goals can be achieved through the following Action Plan:

- (13) Metrics should include a broad set of variables known to be important for faculty success and leadership. Monitoring to include a year by year annual comparison review of our national standing on gender-related indicators. Medical School leadership should continuous monitor metrics regarding female faculty achievement, using data variables that can be tracked over time. They should include distribution by gender and the following:
 - a. Rank
 - i. Distribution by rank (by Department)
 - ii. Time in rank
 - iii. Success rate for promotion, by
 - 1. Rank
 - 2. Track (including tenure, non-tenure)
 - 3. Department
 - b. Leadership roles

- i. Deans
- ii. Vice-Deans
- iii. Chairs
- iv. Vice-Chairs
- v. Division Directors
- vi. Committee Chairs
- vii. Endowed positions (Chairs and Professorships)
- c. Compensation
 - i. Salary
 - ii. Total compensation
 - iii. Initial (hiring) and ongoing salaries
- d. Feature women scholars
 - i. % Women lecturing for seminar series, Grand Rounds, etc.
 - ii. % Women external invited speakers
- e. Equal access to Medical School resources
 - i. % Women receiving intramural funding
 - ii. % Women hired under new initiatives, such as the Medical Discovery Teams
 - iii. Access to other resources including start-up funds, space, administrative support
- f. Potential future metrics
 - i. Publications
 - ii. External funding (benchmark to NIH data)
- (14) **Metrics should be disseminated to leadership and all faculty**, preferably in an annual report format that could also be used for outside evaluation (see Recommendation 16). The report should feature best practices from Departments with successful approaches to equity issues.

(15) Metrics should be an important part of performance evaluations of Deans, Vice-Deans, and Department Chairs.

E. Infrastructure

In order to increase the proportion of women in leadership positions the Medical School, the Women in Leadership Committee recommends leadership make an ongoing commitment to the issue by creating a platform to maintain dissemination and implementation of the proposed plan. To achieve this we request the following:

(16) **Make the Women in Leadership Committee a standing committee.** The Committee should be comprised of both men and women who are committed to working on these issues, and include members involved in the KL2 and BIRCWH training programs. The Committee would also be responsible for preparing an annual report and organizing an annual external review, using an External Advisory Board infrastructure. There are a number of external content experts qualified to review and evaluate gender equity issues around salary and promotion/tenure. Experts might include faculty from the Drexel University Institute for Women's Health and Leadership, AAMC Group on Women in

Medicine and Science, UMN Carlson School of Business, or local industry. Results should be presented to the faculty in an appropriate public forum, such as the Town Hall meetings. The Committee would also host <u>an annual Visiting Professor event</u> (similar to Johns Hopkins Mary Elizabeth Garrett Lectureship³² or Duke University Promoting Women in Medicine Clipp-Speer Visiting Professorship³³) featuring a lecture, workshops and group meetings. This would be both educational and demonstrate ongoing commitment to solving equity issues.

(17) Resources will be needed to help the University of Minnesota Medical School implement best practices to support women in leadership. Among the specific recommendations, salary equity analyses, salary corrections, recruitment of senior and midlevel women faculty, data collection, Committee support, external review and outside speakers will require both financial and faculty FTE resources to support activities.

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