UNIVERSITY OF MICHIGAN GENDER IN SCIENCE AND ENGINEERING

REPORT OF THE

SUBCOMMITTEE ON FACULTY EVALUATION AND DEVELOPMENT

MARCH 2004

Executive Summary of the Report from the Gender in Science and Engineering Subcommittee on Faculty Evaluation and Development

The Subcommittee on Faculty Evaluation and Development of the Gender in Science and Engineering Committee for the University of Michigan was chaired by Terrence J. McDonald, Dean of the College of Literature, Science, and the Arts. It included faculty members from LSA, Engineering, Medicine, Pharmacy, and the LSI.

The Subcommittee was charged to "Examine and evaluate institutional policies and practices for that might differentially impact the progress of women faculty in science and engineering fields," with a particular focus on "promotion and tenure, focusing on the schools/colleges with substantial numbers of faculty in science and engineering disciplines."

In response to this charge, the subcommittee developed a series of recommendations aimed at maximizing transparency, equity, and collegiality. Though stimulated by consideration of the needs of women faculty in the sciences and engineering, these recommendations will improve the academic environment for all faculty. We have organized these seven recommendations in terms of the career course of a faculty member.

1. *Mentoring programs for all untenured faculty or assistant professors:* Each academic department at the University should have in place a formal mentoring program available to all untenured faculty or assistant professors. The committee details specific features of desirable programs.

2. *Faculty Annual Reviews:* Annual review information should be collected from all faculty in a standardized manner within all departments and colleges. The committee has reviewed a number of different forms and has distilled what we found as best practices into a template form, which provides for explicit prompting of many categories.

3. *Third Year Review:* Third year reviews are mandated on campus; however, current implementation varies widely. We recommend some standardization of best practices.

4. Adoption of a More Flexible Tenure Probationary Period: The University should adopt a more flexible tenure probationary period for untenured faculty on the tenure track, while maintaining a uniform standard of performance. Specifically, we recommend that the criteria for accomplishments in the area of scholarship, teaching, and service should be set based on the assumption of a tenure review in the sixth year. However, in consideration of unusual professional or personal circumstances, the tenure review may be conducted at any time between the sixth and ninth years, using those criteria and that standard.

5. *Training for Faculty Members Involved in Tenure/Promotion Decisions*: Faculty members who sit on committees given the responsibility for deciding whether an untenured faculty member will be granted tenure, or whether individuals are to be promoted to full professor, should be required to attend training designed to educate them on all aspects of the decision-making process including gender and other biases that affect evaluation processes reflected in the materials they review (teaching evaluations, recommendations, etc.), and in their own deliberations.

6. *Associate Professor Development:* All schools and colleges at the University should establish guidelines that will assist tenured professors at the associate level in preparing for promotion to full professor. All faculty members promoted to associate professor with tenure should receive a review in their third year in rank, which will result in a formal promotion plan.

7. Senior Faculty Development: All faculty members promoted to full professor should receive a review after seven years in rank, followed by additional reviews after each seven-year interval. This recommendation is intended partly to counter the trend toward a "counter-offer culture."

The Gender in Science and Engineering Subcommittee on Faculty Evaluation and Development

The Subcommittee on Faculty Evaluation and Development of the Gender in Science and Engineering Committee for the University of Michigan was chaired by Terrence J. McDonald, Dean of the College of Literature, Science, and the Arts. Mark Garrett (Doctoral Candidate, The Center for the Study of Higher and Postsecondary Education, School of Education) and Abby Stewart (Associate Dean for Academic Affairs, LSA) provided support to the committee. Committee members included:

Katherine Freese, Department of Physics, LSA Margaret Gyetko, Internal Medicine, Medical School Tresa Pollock, Materials Science and Engineering, College of Engineering, Naír Rodríguez-Hornedo, Department of Pharmaceutical Sciences, College of Pharmacy William Roush, Department of Chemistry, LSA Alan Saltiel, Medical School, Life Sciences Institute

The Subcommittee was charged to "Examine and evaluate institutional policies and practices for that might differentially impact the progress of women faculty in science and engineering fields," with a particular focus on "promotion and tenure, focusing on the schools/colleges with substantial numbers of faculty in science and engineering disciplines." It was further charged to "recommend goals for improved policies and practices," and to "identify potential measurable outcomes and methods."

In response to this charge, the subcommittee identified several particular policies that are pertinent, reviewed them, and developed a series of recommendations aimed at maximizing transparency, equity, and collegiality. We believe the resulting recommendations, though stimulated by consideration of the needs of women faculty in the sciences and engineering, will improve the academic environment for all faculty. We have organized these seven recommendations in terms of the career course of a faculty member, and listed them in the next section. In the final section, we provide more detailed rationales for each of these recommendations.

Recommendations

1. Mentoring programs for all untenured faculty or assistant professors: Each academic department at the university should have in place a formal mentoring program available to all untenured faculty or assistant professors. The two types of programs this committee recommends are: (1) appointment of a committee of three or more tenured faculty members to constitute a mentoring committee, which should meet as a group with the mentee at least once each year; committee membership should be jointly decided by the chair and the mentee. This model is likely to work best in larger departments and/or interdisciplinary programs, but is recommended as optimal for all units. Therefore we encourage units to attempt to implement it, even if this requires recruitment of faculty participants in mentoring committees from outside the department or program. One

member of this committee should normally play some role in communicating information from the mentoring committee to evaluators in the department (e.g., the chair, salary review committees, tenure and promotion and/or executive committees, etc.). (2) Appointment of a senior faculty mentor jointly selected by the mentee and the department chair; that individual, the department chair and the mentee should meet together at least once each year as a group to discuss the mentee's progress, as well as a plan for mentorship for the next year. This model is likely to become necessary in smaller departments and programs with limited personnel available for mentoring. One drawback of this model is that it makes it very difficult to separate mentoring and evaluation.

In addition to the formal mentoring program in which senior faculty provide guidance to untenured faculty or assistant professors, we recommend that peer or group mentoring procedures be established to supplement the senior faculty mentoring in the department or program.

2. *Faculty Annual Reviews:* Annual review information should be collected from all faculty in a standardized manner within all departments and colleges. The committee has reviewed a number of different forms and has distilled what we found as best practices into a template form, which provides for explicit prompting of many categories. This form is included as Appendix A.

We recommend that the weighting attached to each area of faculty activity for salary recommendations should also be made explicit to all faculty members in that department, partly as a way to provide information to faculty about where they may be investing more or less energy and effort than is valued by the unit.

The revised Faculty Annual Review form we have designed provides faculty members the opportunity to provide information on the gender balance in courses that they teach. Research shows that the demographic makeup of courses can significantly affect teaching evaluations. It is important for faculty members to have the opportunity to speak to this potential bias.

We believe that all deans and department chairs should be sent a cover memo encouraging adoption of the Faculty Annual Review form in their schools and departments. Use of this kind of template will improve the possibility of a fair, consistent opportunity for faculty to speak to their accomplishments on a yearly basis.

3. *Third Year Review:* Third year reviews are mandated on campus; however, current implementation varies widely. We recommend some standardization of best practices. First, each department, school, and college across the university should conduct a formal third-year review for all untenured tenure track faculty members. This review obviously provides an opportunity for termination if that is warranted. More commonly, it provides an opportunity for the department or program to assess the faculty member's progress in scholarship, teaching and participation in the life of the unit, and to give the individual feedback about that progress, and important issues to address before the tenure review.

The subcommittee views disciplinary and college differences as too large to provide specific procedures for the third year review. It does, however, recommend the following

Best Practices be incorporated into the third-year review procedures that are adopted in each unit and provided as information to all faculty.

- 1. Avoid use of outside letters. Currently, LSA, Engineering, and Medicine do not use outside letters. Reasons for this exclusion include fairness to a candidate in terms of avoidance of excessive review at a premature stage; avoidance of undue labor for departments and programs and exhaustion of the goodwill of external evaluators at this stage of review; and early notification of the outstanding work of our developing faculty to scholars at other institutions.
- 2. The format for a third-year review should be similar to the revised Faculty Annual Review form. Information should be elicited in specific categories rather than presumed.
- 3. Standards should be rigorous but not unrealistic for the third-year review.
- 4. Each unit that an untenured tenure track faculty member is a part of should have a role in the third-year review.
- 5. All untenured tenure-track faculty members should be required to write a Teaching & Research statement as part of the third-year review.
- 6. Successful models of third-year review dossiers should be provided to untenured tenure-track faculty members.
- 7. Each school and college should have procedures developed for the third-year review, and all faculty members within that organization should know what these procedures are.

4. Adoption of a more flexible tenure probationary period: The University should adopt a more flexible tenure probationary period for untenured faculty on the tenure track, while maintaining a uniform standard of performance. Specifically, we recommend that the criteria for accomplishments in the area of scholarship, teaching and service should be set based on the assumption of a tenure review in the sixth year. However, the tenure review may be conducted at any time between the sixth and ninth years, using those criteria and that standard. In the third year of an initial appointment, all untenured faculty members will be reviewed for a second three-year contract. If renewed, in the fifth year the untenured faculty member will have a second internal review, during which the department will propose a tenure review in the 6th year or a one-time postponement up to the ninth year based on the professional and personal demands he or she is balancing.

5. *Training for faculty members involved in tenure/promotion decisions*: Faculty members who sit on committees given the responsibility for deciding whether an untenured faculty member will be granted tenure, or whether individuals are to be promoted to full professor, should be required to attend training designed to educate them on all aspects of the decision-making process including gender and other biases that affect evaluation processes reflected in the materials they review (teaching evaluations, recommendations, etc.), and in their own deliberations.

6. Associate Professor Development: All schools and colleges at the University should establish guidelines that will assist tenured professors at the associate level in preparing for promotion to full professor. All faculty members promoted to associate professor with tenure should receive a review in their third year in rank, which will result in a formal promotion plan. The normal time-frame for a person to remain at the associate professor level before promotion should be approximately six years, but faculty can be reviewed before that time if it is appropriate. Associate professors should also receive annual reviews to determine whether they are ready to be reviewed for promotion to full professor.

7. Senior Faculty Development: All faculty members promoted to full professor should receive a review after seven years in rank, followed by additional reviews after each seven-year interval. This recommendation is intended partly to counter the trend toward a "counter-offer culture." A review of full professors may help reduce the accumulation of small salary disparities into large pay inequities, because formal reviews offer an opportunity for individuals' accomplishments and contributions to be systematically reviewed and recognized. Equally, this formal review process permits faculty who feel undervalued or marginalized to be recognized in new ways by their colleagues and administrators. Finally, a review of this kind provides an incentive for faculty to continue the outstanding research, teaching, and service they accomplished to achieve promotion to the rank of full professor.

Mentoring programs for all untenured faculty or assistant professors: Each academic department at the university should have in place a formal mentoring program available to all untenured faculty or assistant professors. The two types of programs this committee recommends are: (1) appointment of a committee of three or more tenured faculty members to constitute a mentoring committee, which should meet as a group with the mentee at least once each year; committee membership should be jointly decided by the chair and the mentee. This model is likely to work best in larger departments and/or interdisciplinary programs, but is recommended as optimal for all units. Therefore we encourage units to attempt to implement it, even if this requires recruitment of faculty participants in mentoring committees from outside the department or program. One member of this committee should normally play some role in communicating information from the mentoring committee to evaluators in the department (e.g., the chair, salary review committees, tenure and promotion and/or executive committees, etc.). (2) Appointment of a senior faculty mentor jointly selected by the mentee and the department chair; that individual, the department chair and the mentee should meet together at least once each year as a group to discuss the mentee's progress, as well as a plan for mentorship for the next year. This model is likely to become necessary in smaller departments and programs with limited personnel available for mentoring. One drawback of this model is that it makes it very difficult to separate mentoring and evaluation.

In addition to the formal mentoring program in which senior faculty provide guidance to untenured faculty or assistant professors, we recommend that peer or group mentoring procedures be established to supplement the senior faculty mentoring in the department or program.

Rationale for Recommendation

Members of the Gender in Science and Engineering Subcommittee on Faculty Evaluation and Development have found through observations of their own departments, and review of data collected by the UM ADVANCE program, that mentoring programs across the university for untenured faculty or assistant professors (as in many places) are often uneven in their implementation, sporadic in their operation, and ill-defined. Untenured faculty or assistant professors and their respective chairs often do not agree in their views of how well the programs in place are working. While many chairs believe that they have a mentoring program in place within their respective departments, untenured faculty or assistant professors often find these programs to be inadequate for their needs. Moreover, there is considerable evidence that the absence of formal mentoring has disproportionately negative effects on the careers of those underrepresented in the senior or "mentor" ranks (generally women and faculty of color; see, e.g., Kram, 1985; Murrell, Crosby & Ely, 1999; Preston, forthcoming; for summaries of the literature).

We believe that all faculty members need advice of various kinds at different points in their careers. A formal mentoring program provides some institutionally-sanctioned structure to permit untenured faculty members to seek this advice early on. Also, such a program allows untenured faculty or assistant professors to request information and feedback that they believe they need to be successful. Mentors can assist mentees not only in their scholarship (by reviewing manuscripts, grant proposals, etc.), but in their planning, and in learning and understanding the departmental culture, teaching practices, university guidelines and procedures, etc. to smooth the transition to Michigan and life as a faculty member.

We believe that the goal of faculty mentorship programs is to provide opportunities for all untenured faculty or assistant professors to acquire feedback and information. It is not, however, to provide a relationship that replicates the advisor-advisee relationship common in graduate and postdoctoral settings. Thus, we believe individuals should have more than one mentor, and should be encouraged to seek alternate perspectives from different mentors about the same issues. The untenured faculty member is seeking information and advice and then making career decision-making; she or he is not a protégée or advisee who is being shaped or directed. For that reason, we recommend against assignment of a single mentor to untenured faculty or assistant professors.

Equally, mentoring should be separated—as much as possible—from evaluation. For this reason, we recommend the first model outlined, according to which the mentoring committee does not function as evaluators during the tenure probationary period. At the same time, it is critical that the mentoring committee be represented in every formal evaluation process undertaken during the probationary period. For that reason, we recommend that one member of the committee be designated to participate in these processes, either as an informant (e.g., to the chair about the mentoring committee's view of the candidate's progress) or as a participant (e.g., in third year and tenure reviews at the department level). In this way the candidate's need for frank information and feedback can be protected, without removing all of those most knowledgeable about the candidate's work from evaluation processes.

We recognize that the mentoring relationship is a vague and ill-defined one; moreover, there is evidence that when mentors believe the relationship is intended to be extensive and intensive they are more uncomfortable mentoring across differences in gender and race-ethnicity (see, e.g., Crosby, 1999; Ragins, 1995; 1997). We encourage departments to specify the sorts of advice and information that mentors should plan to provide, and that mentees should seek. In addition, we believe it is in the mentee's best interest to initiate meetings and to set agendas for discussion, seeking information and advice in areas in which she or he feels they are most needed.

Finally, we believe that group and peer mentoring are often very valuable and should be used to supplement (but should not replace) senior faculty mentoring. One valuable model provides for all untenured faculty or assistant professors in a department to meet on a regular basis (e.g., once/month or 3 times/term), with an agenda they determine. They may choose to use the time to discuss problem-solving strategies on their own, or to invite in senior faculty to discuss particular topics (setting up a lab, choosing a publisher, the tenure process, the third year review, etc.). Many departments have found this kind of self-run peer or group mentoring is very effective both for ensuring that all untenured faculty or assistant professors have the same information and for building a sense of community among the untenured faculty or assistant professors in a field. Small departments or programs may choose to pursue this kind of model across a couple of related units in order to ensure that untenured faculty or assistant professors find a community of support for one another.

Crosby, F.J. (1999). The developing literature on developmental relationships. In A. Murrell, F.J. Crosby, & R.J. Ely (Eds.) (1999). *Mentoring dilemmas: Developmental relationships within multicultural organizations* (pp. 3-18). Mahwah, NJ: Lawrence Erlbaum.

Kram, K. E. (1985). Mentoring at work. Glenview, IL: Scott, Foresman.

Murrell, A., Crosby, F.J. & Ely, R.J. (Eds.) (1999). *Mentoring dilemmas: Developmental relationships within multicultural organizations*. Mahwah, NJ: Lawrence Erlbaum.

Preston, A. (forthcoming). *Leaving science: An analysis of occupational exit of men and women from sciences and engineering*. (currently available at http://www.haverford.edu/econ/faculty/preston home.html).

Ragins, B.R. (1995). Diversity, power, and mentorship in organizations: A cultural, structural and behavioral perspective. In M. Chemers, M.Costanzo, & S. Oskamp (Ed.s), *Diversity in organizations* (pp. 91-132). Newbury Park, NJ: Sage. Ragins, B.R. (1997). Diversified mentoring relationships in organizations: A power perspective. *Academy of Management Review*, *22*, 482-521.

Faculty Annual Reviews: Annual review information should be collected from all tenured and tenure-track faculty in a standardized manner within all departments and colleges. The committee has reviewed a number of different forms and has distilled what we found as best practices into a template form, which provides for explicit prompting of many categories. This form is included as Appendix A.

Rationale for Recommendation

The subcommittee has compared different Faculty Annual Review practices and procedures used by various departments across campus. After discussion of these different practices, the subcommittee drew several conclusions:

Annual reviews are valuable yearly opportunities for feedback to faculty, as well as in salary setting recommendations. They are particularly important for faculty in the assistant and associate professor ranks, but they are valuable for all faculty. They can only be useful if they are based on complete and accurate information. Explicit prompting provides a much better guarantee of complete and comparable information than does implicit prompting.

Unintended and unconscious reliance on group stereotypes is maximized when there is little information that differentiates an individual from other members of her or his group (see Valian, 1999 for a summary of research). Therefore, it is important to ensure that individual information is provided in a manner that is complete. For these reasons, the committee recommends that information be collected in a standardized manner in all departments.

The committee has reviewed a number of different forms and has distilled what we found as best practices into the enclosed form, which provides for explicit prompting for information in many categories.

We recommend that the weighting attached to each area of faculty activity for salary recommendations should also be made explicit to all faculty members in that department, partly as a way to provide information to faculty about where they may be investing more or less energy and effort than is valued by the unit. We recognize the importance of explicit guidelines on this, but also that it varies by discipline. Therefore we believe it cannot be prescribed centrally but should be tailored in each department or discipline.

The revised Faculty Annual Review form we have designed (Appendix A) provides faculty members the opportunity to provide information on the gender balance in courses that they teach. Research shows that the demographic makeup of courses can significantly affect teaching evaluations (Basow, 1995). In particular, women tend to be rated lower by students when their classes are composed largely of men students. For that reason, it is important for faculty members to have the opportunity to speak to this potential bias.

We believe that all deans and department chairs should be sent the enclosed cover memo encouraging adoption of the Faculty Annual Review form in their schools and departments. We believe that use of this kind of template will improve the possibility of a fair, consistent opportunity for faculty to speak to their accomplishments on a yearly basis.

- Basow, S.A. (1995). Student evaluations of college professors: When gender matters. *Journal of Educational Psychology*, 87 (4), 656-665.
- Valian, V. (1999). Why so slow? The advancement of women. Cambridge, MA: MIT Press.

Third Year Review: Each department, school, and college across the university should conduct a formal third-year review for all untenured tenure-track faculty members. This review obviously provides an opportunity for termination if that is warranted. More commonly, it provides an opportunity for the department or program to assess the faculty member's progress in scholarship, teaching and participation in the life of the unit and to give the individual feedback about that progress, and important issues to address before the tenure review.

The subcommittee views disciplinary and college differences as too large to provide specific procedures for the third year review. It does, however, recommend the following *Best Practices* be incorporated into the third-year review procedures that are adopted in each unit and provided as information to all faculty:

- 1. Avoid use of outside letters. Currently, LSA, Engineering, and Medicine do not use outside letters. Reasons for this exclusion include fairness to a candidate in terms of avoidance of excessive review at a premature stage; avoidance of undue labor for departments and programs and exhaustion of the goodwill of external evaluators at this stage of review; and early notification of the outstanding work of our developing faculty to scholars at other institutions.
- 2. The format for a third-year review should be similar to the revised Faculty Annual Review form. Information should be elicited in specific categories rather than presumed.
- 3. Standards should be rigorous but not unrealistic for the third-year review.
- 4. Each unit that an untenured tenure-track faculty member is a part of should have a role in the third-year review.
- 5. All untenured tenure-track faculty members should be required to write a Teaching & Research statement as part of the third-year review.
- 6. Successful models of third-year review dossiers should be provided to untenured tenure-track faculty members.
- 7. Each school and college should have procedures developed for the third-year review, and all faculty members within that organization should know what these procedures are.

Rationale for Recommendation

It already is the norm for most schools and colleges at Michigan to require a third-year review of untenured tenure-track faculty members. The third-year review is an essential part of the growth and development of untenured tenure-track faculty members, providing them an opportunity to have a formal assessment of their work thus far at Michigan. We believe the "best practices" will enhance the transparency, clarity and utility of the third year review for all concerned.

Adoption of a more flexible tenure probationary period: The University should adopt a more flexible tenure probationary period for untenured faculty on the tenure track, while maintaining a uniform standard of performance. Specifically, we recommend that the criteria for accomplishments in the area of scholarship, teaching and service should be set based on the assumption of a tenure review in the sixth year. However, the tenure review may be conducted at any time between the sixth and ninth years, using those criteria and that standard. In the third year of an initial appointment, all untenured faculty members will be reviewed for a second three-year contract. If renewed, in the fifth year the untenured faculty member will have a second internal review, during which the department will propose a tenure review in the 6th year or a one-time postponement based on the professional and personal demands he or she is balancing. If tenure is denied at the point of review, the tenure candidate will normally be provided with a one-year contract, after which his or her appointment will be terminated.

Rationale for Recommendation

The American Association of University Professors (AAUP) was formed in 1915 and shortly thereafter a probationary period of ten years was instituted for untenured faculty members. Over the next two decades there was a significant amount of discussion about this length of probationary time before a faculty member is reviewed for tenure. Professional organizations such as the American Council on Education (ACE) still wanted a long probationary period (9 – 10 years). However, other national associations wanted a shorter period of probationary time (5 – 6) years). Seven years was chosen as the normal time period for one to achieve tenure among the various interested parties through negotiations and compromise. This history points to the arbitrariness of the current tenure probationary period, despite its persistence.

Currently several factors may lead individual untenured faculty to have more than the canonical six years in rank: they may have already served in an assistant professor position at another institution for up to six years; they may have taken postdoctoral training or research positions after receiving their doctorate; they may have delayed the tenure review as a result of childrearing or catastrophic personal or family circumstances that resulted in a delay. Thus, the tenure probationary period is rigid in its application to individuals, but it does not in fact provide for a standard length of time for individual faculty to complete the work that is reviewed.

Moreover, there have been dramatic changes in the academic context since AAUP adopted the seven-year tenure clock. For instance, in the natural and some social sciences, many research problems now require the development of an interdisciplinary research program or establishment of a complex laboratory. In the humanities and some social science fields, complexities associated with changes in publishing practices and norms, particularly surrounding monographs, have greatly extended the timeframe needed for publication of books and, in some fields, even refereed journal articles.

The many schools and colleges at the University of Michigan do an outstanding job of recruiting high-caliber faculty members who will become leaders in their respective

fields. Allowing them time to establish a strong research portfolio in a timeframe that is flexible rather than rigid benefits the university in numerous ways. The initial institutional investment in untenured faculty appointed here is substantial. It is our view that there is a greater risk of making the wrong decision not to tenure a faculty member based on a rigid timeframe than there is risk of retaining untenured faculty a little longer in order to make a more certain judgment.

In addition, there are sometimes pernicious effects on faculty research programs due to the short and rigid tenure clock. Providing a more flexible tenure clock would permit untenured faculty members to make choices and decisions about their research program that are not dictated by their "tenure clock." For example, an untenured faculty member may be able to take time to obtain resources and build a more sophisticated experimental program or conduct longitudinal studies that would not normally be possible within the current time frame.

This recommendation for providing a more flexible tenure clock does not imply that standards for achieving tenure will be raised or lowered. Rather, standards should remain the same based on the norm of six years.

The subcommittee has used the word "flexible" in this recommendation for a distinct purpose. We are not recommending that all untenured faculty members must wait until their ninth year at the university to be reviewed for tenure. Rather, the expectation would be for most faculty members to be reviewed during their sixth year. However, any faculty member would have the right to request more time if he or she felt a longer timeframe would provide a more appropriate context for evaluation.

Finally, this committee notes that the recommended tenure review process rests on two early reviews: the third-year review and a second review in the fifth year that permits departments and candidates to plan for the tenure review. The fifth year review will provide more feedback to the faculty member and maintain accountability to the tenure probationary system.

Training for faculty members involved in tenure decisions: Faculty members who sit on committees given the responsibility for deciding whether an untenured faculty member will be granted tenure should be required to attend training designed to educate them on all aspects of the decision-making process including gender and other biases that affect evaluation processes reflected in the materials they review (teaching evaluations, recommendations, etc.), and in their own deliberations.

Rationale for Recommendation

There has been a fair amount of research on gender bias in the evaluation of faculty members. (Much of this research was summarized in Virginia Valian's book, *Why so slow?*) This research suggests that the operation of gender schemas, particularly in fields where women are underrepresented, is likely to result in systematic biases in evaluative judgments (by students in rating faculty, by recommenders in writing about faculty, and by judges in drawing conclusions), biases that disadvantage women and advantage men. Parallel research has been conducted on the evaluation of ethnic minorities.

Exposure to conceptual tools and systematic research evidence about the unconscious operation of bias in evaluation can lead individuals to self-consciously resist these processes. Clearly it is critical for the tenure review process to be equally fair to all of those scrutinized within it. For that reason, we believe that it is important to standardize exposure to both the conceptual tools and the systematic research evidence among those individuals entrusted to make recommendations about tenure and promotion.

This training could be conducted in conventional classroom settings, but we recommend as an alternative that a computer-assisted program be developed that could be self-administered by faculty members (like the current Program for Education and Evaluation in Responsible Research and Scholarship [PEERRS] provided for teaching faculty about conflict of interest issues in research), and monitored by administrators. Such a program is under development at the Georgia Institute of Technology, and is outlined in their October 2003 *Report of the Georgia Tech Promotion and Tenure ADVANCE Committee.*¹

¹ The program is described as follows:

[&]quot;ADEPT (*Awareness of Decisions in Evaluating Promotion and Tenure*) is a web-based instrument collecting and building on PTAC research. The ADEPT instrument presents several interrelated components: the PTAC report and 2003 survey, case studies with questions, including an interactive mode, activities for individual users, a bibliography on bias in evaluation, and related ADVANCE research.

One of the primary goals of the ADEPT instrument is to assist users in identifying forms of bias in evaluation processes in order to achieve fair and objective evaluations. ADEPT is designed to be used both by candidates for promotion and tenure and by members of unit-level committees evaluating promotion and tenure cases in U.S. colleges and universities.

ADEPT presents two sets of activities, those designed to enhance a candidate's abilities to prepare his/her record for evaluation, and those designed to help members of unit-level promotion and tenure committees understand the subtleties of bias in the evaluation process. The candidate portion of ADEPT will include guidance in building a strong dossier, while the committee member activity involves the user in fictional evaluation meetings featuring mock P&T case studies.

These ADEPT activities are linked to an annotated bibliography of research focusing on a broad range of forms of bias related to gender, ethnicity, choice of publication venues, engagement in interdisciplinary research, assignment of service activities, allocation of resources, mentoring, disability, and more.

ADEPT contains the 2003 PTAC report and connects its findings, particularly those concerning forms of bias and best practices, with case studies of fictional candidates and unit-level promotion and tenure meetings. In addition,

Associate Professor Development: All schools and colleges at the university should establish guidelines that will assist tenured professors at the associate level in preparing for promotion to full professor. All faculty members promoted to associate professor with tenure should receive a review in their third year in rank, which will result in a formal promotion plan. The normal time-frame for a person to remain at the associate professor level before promotion should be approximately six years, but faculty can be reviewed before that time if it is appropriate. Associate professors should also receive annual reviews to determine whether they are ready to be reviewed for promotion to full professor.

Rationale for Recommendation

Associate professors with tenure have received a life-time commitment from the university; thus, the institution has a vested interest in helping these colleagues secure promotion to full professor. This subcommittee learned of circumstances in which people have languished at the associate professor level for much extended periods (in one situation, 25 years) before being reviewed for promotion to full professor. At the same time, some faculty accomplish a great deal in fewer than six years after promotion to tenure and the associate professor title, becoming targets for recruitment elsewhere. When faculty have accumulated appropriate records for promotion, regardless of the length of time in rank, it is both fair and prudent to recognize that accomplishment by reviewing them for promotion as early as possible.

Despite the many parallels between the process of promotion to the rank of associate professor with tenure and the process of promotion to the rank of professor, there are also significant differences. The most obvious of these include, in the latter case, the absence of a required date for the promotion review, and the possibility of coming up for review again after a negative review. These differences require specific practices by units, the most important of which is extensive mentoring of associate professors, beginning at the point of their promotion, including the preparation of a plan for promotion.

The promotion plan should be agreed upon and approved by the faculty member, his or her department chair, and a decision-making body that consist of tenured faculty at the rank of full-professor. In the event of a negative decision for promotion to full professor, a new plan that allows the member to be put forward for review in at most three years should be developed by the candidate and department in collaboration.

The recommended promotion plan will provide the associate professor with clear guidelines as to what he or she needs to accomplish to be eligible for promotion to full professor. The promotion plan should be ambitious, but realistic. Suggested guidelines for achieving promotion to full professor might include new scholarly accomplishment in terms of quantity and quality of publications. In addition, the associate professor is expected to have a broadly established national as well as international reputation, and should show promise of substantial future contributions to his/her disciplinary field.

references are provided regarding a 2003 survey of Georgia Tech's academic faculty aimed at capturing a snapshot of perceptions about promotion and tenure processes, faculty development, and Institute culture."

Another highly-valued criterion is a history of funding through peer-reviewed or other sources. The candidate should also have established an area of unique contribution to the teaching program, will have demonstrated an ongoing record of teaching success, and made a significant contribution to the administration of his/her unit and to academic service. Given that the service commitment for a professor promoted from assistant to associate professor increases substantially, this area should be weighted more heavily in annual reviews and as part of the recommendation for promotion to full professor.

7. Senior Faculty Development: All faculty members promoted to full professor should receive a review after seven years in rank, followed by additional reviews after each seven-year interval. This recommendation is intended partly to counter the trend toward a "counter-offer culture." A review of full professors may help reduce the accumulation of small salary disparities into large pay inequities, because formal reviews offer an opportunity for individuals' accomplishments and contributions to be systematically reviewed and recognized. Equally, this formal review process permits faculty who feel undervalued or marginalized to be recognized in new ways by their colleagues and administrators. Finally, a review of this kind provides an incentive for faculty to continue the outstanding research, teaching, and service they accomplished to achieve promotion to the rank of full professor.

Rationale for Recommendation

The members of this subcommittee recognize that the university needs to ensure that faculty promoted to the rank of full professor continue to be productive and active at a high level. At the same time, we also recognize that there are pernicious effects both of a "counter-offer" process according to which some faculty seek and receive large salary increases outside the normal salary review process. These effects include relative demoralization of faculty who feel they are "taxed" for their institutional loyalty and commitment, and of faculty who feel that their steady, substantial contributions to the department, college and/or university are unrecognized—either in salary or in more intangible forms of status. Moreover, there is considerable evidence that women are specifically disadvantaged in the "outside offer" market, because of their reluctance to seek offers they will not accept (perhaps partly because of their greater constraint by dual career households). The current system, in which all full professors are evaluated annually for relatively narrow ranges of salary increments permits salary inequities to develop and accumulate over long periods.

For all of these reasons the subcommittee recommends, in full recognition that this plan will increase the burden of evaluation on all senior faculty, that we adopt a formal system of systematic review of full professors. The choice of a seven-year interval is arbitrary, but was selected under the assumption that this would limit the period of accumulation of small inequities without full review, and at the same time would limit the burden of evaluation (both for the candidate and for the reviewers). The subcommittee recommends that outside letters be required for this review (since the hope is that this review may permit an individual faculty members' value to be recalibrated internally), but kept to a minimum (e.g., four; to lessen the burden of evaluation on external evaluators).

APPENDIX A

DRAFT Memo about Faculty Annual Review Form Faculty Activity Form

DRAFT Memo about Faculty Annual Review Form

To: Department Chairs

From: GSE Subcommittee on Faculty Evaluation and Development

The Subcommittee on Faculty Evaluation and Development of the Gender in Science and Engineering Committee for the University of Michigan was assigned to review University policies in the broad area of faculty evaluation and development as they may affect gender issues in science and engineering in particular.

The subcommittee has spent a significant amount of time both examining and comparing the different Faculty Annual Review practices and procedures used by various departments across campus. We have concluded that:

- Annual reviews are valuable yearly opportunities for feedback to faculty, as well as in salary setting recommendations.
- (2) They are particularly important for faculty in the assistant and associate professor ranks, but they are valuable for all faculty.
- (3) They can only be useful if they are based on complete and accurate information. Explicit prompting provides a much better guarantee of complete and comparable information than does implicit prompting.

Therefore, the committee recommends that information be collected in a standardized manner in all departments.

The committee has reviewed a number of different forms and has distilled what we found as best practices into the enclosed form, which provides for explicit prompting of many categories.

We recommend that the weighting attached to each area should also be made explicit to all faculty members in that department, partly as a way to provide information to faculty about where they may be investing more or less energy and effort than is valued by the unit. We recognize the importance of explicit guidelines on this, but also that it varies by discipline. Therefore we believe it cannot be prescribed centrally but should be tailored in each department or discipline. You will notice that the revised Faculty Annual Review form provides faculty members the opportunity to provide information on the gender balance in courses that they teach. Research shows that the demographic makeup of courses can significantly affect teaching evaluations. In particular, women tend to be rated lower by students when their classes are composed largely of men students. For that reason, it is important for faculty members to have the opportunity to speak to this potential bias if their teaching evaluations are low.

We hope that you will encourage the adoption of this Faculty Annual Review form in your department. We believe that it improves the possibility of a fair, consistent opportunity for faculty to speak to their accomplishments on a yearly basis. Name:

Faculty Activity Report

Period of Activity _____ to _____

Instructions:

Please complete this form to document your activities over the past year. Your merit raise will be determined based on the information you provide here. Please include a copy of your current vita, reprints and course syllabi with your materials.

All faculty members are to complete these materials every spring. You may add lines and pages as needed to provide complete information. This form is available as an electronic file.

A. <u>Teaching</u>

1. Courses taught during the year, including directed study projects and research hours. For regular courses, include enrollment and student evaluation scores on the broadest questions assessing the quality of the course and the instructor.

	Lecture Courses						
Course #	Course Name	Term	Enrollment			Was this a new course?	
				Rating*	Rating**		

* Median score on Question 1 of E&E evaluation summary. ** Median score on Question 2 of E&E evaluation summary.

	Directed Study and Research Courses						
Course #	Course NameTermStudent Name(s)						

a. If any course or instructor rating is below 3.0, please include an explanation here.

b. If relevant, comment on the gender balance of students in each course.

2. Summer conference courses, short courses or other teaching activities.

Course Name	Venue	Enrollment

3. List the names, status and positions obtained for your Ph.D. and Masters students in the current year.

Student Name	<u>Indicate:</u> Graduated (date); Cand. (exp. grad. date); Precand. (exp. grad. date)	Name of Co- Advisor, if any	Positions Obtained

4. Ph.D. committee (post-candidacy) membership (list names of students). Do not include chairships listed in item A3.

5. Undergraduate projects or graduate projects involving students not listed in A1 or A3 above.

6. Provide additional information concerning your significant contributions to teaching, including development of a new course, a major revision of an existing course, laboratories supervised, etc.

7. Explain what you think your most significant contributions to teaching were this year.

B. <u>Research</u>

In this section, include the names of all authors in the order in which they appeared in the publication; include page numbers; underline your students' names; and identify 'keynote' or 'invited' as appropriate.

Note: Different departments may list these forms of publication in different orders, to reflect the order of their average importance in the discipline.

- 1. Books, book chapters and book reviews.
- 2. Published articles in refereed publications (journals or transactions).
- 3. Letters, briefs, notes or other shorter communications in refereed publications.
- 4. Papers published in rigorously reviewed conferences with archival proceedings.
- 5. Other papers presented at conferences, symposia or workshops with published proceedings.
- 6. Presentations at meetings that are not included in a published proceedings.

7. Number of (a) keynote conference or symposium presentations and (b) invited journal or conference papers. These should be listed above and designated in the listing as invited or keynote.

- a) Number of keynote addresses
- b) Number of invited papers

- 8. Invited talks to prestigious seminars or colloquia.
- 9. Patent and software disclosures to UM Office of Technology Transfer.
- 10. Patents issued this year (list licensees) and software distributed this year (list users).
- 11. Major media exposure.
- 12. Papers submitted for publication along with their publication status.

13. Research grants and contracts under your supervision during the period of this report. Feel free to add any explanatory notes.

a. As PI or Co-PI

Project Title (Your Role: PI or Co-PI)	Source of Funds	Total Funding this year in your name

b. Others (not as PI or Co-PI)

Project Title	Source	Total Funding	* Your Share (in
(Identify Project Director and	of Funds	and Funding	dollars) of
other PIs)		Period	Research
			Expenditures for
			the Period of
			this FAR

14. Proposals submitted during the year and their status.

Project Title (Identify Project Director and other PIs)	Source of Funds	Total Funding and Funding Period	Your Total Share (in dollars) of Project Budget

15. Fractional general fund and sponsored research appointments for Winter Term 20___ and Fall Term 20___.

	General Fund Percentage	Sponsored Research Percentage
Winter 20		
Fall 20		

16. Explain what you think your most significant contributions to research were this year.

C. Service

Include formally assigned as well as informal activities.

1. Internal

Dept, College, or Univ.	Service Assignment	Role	Estimate Time Contributed (per week/month)

2. Professional (membership on editorial boards, reviewer of manuscripts & grants, officer in national organizations, site visits, member of major review panel, service in community, editor of scholarly journals, conferences organized, etc.)

Organization	Service Assignment	Role

- 3. Outreach activities (pre-college student training and recruiting, minority and women faculty and student recruiting).
- 4. Mentoring of faculty and students (in addition to graduate students you are supervising).

a. Please list the names of any junior faculty for whom you read a draft version of a manuscript and provided feedback on.

b. Please list the names of any junior faculty to whom you were assigned to be a mentor.

- 5. Explain what you think your most significant contributions to service were this year.
- 6. On which committees would you like to serve?

D. <u>Recognitions, Honors and Awards</u>

E. <u>Are there any other issues that affect your performance that you would like to bring to the attention of a chair?</u>