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Effective Faculty Mentoring

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This memo presents highlights from the literature about the challenges associated with mentoring across difference[2] and offers policy recommendations for the effective implementation of mentoring programs in service of diversifying the faculty.

Background

What do we mean by mentoring?

Perhaps because the term mentor has its origins in Greek mythology[3], "trusted friend" has become synonymous with the concept, but recent literature tells us that an effective mentor on the job is much more than that.

According to JoAnn Moody (2004), the best mentors provide "psychological support as well as instrumental assistance." She noted:

> Instrumental mentoring occurs when senior colleagues take the time to critique the scholarly work of junior faculty, nominate them for career-enhancing awards, include them in valuable networks and circles, collaborate with them on research or teaching projects, and arrange for them to chair conference sessions or submit invited manuscripts.

David Thomas (2003) distinguished between mentoring that was basically "instructional" (helps build skills) and that which is more "developmental" (helps explain experiences and feelings).

For our purposes, I define effective mentoring as that which is instructional, developmental, psychological, and instrumental. All of these forms of mentoring are especially important when mentoring across differences. Further, effective mentoring occurs over time, is personal in nature and reciprocal (Johnson, 2007).

What do we mean by mentoring across differences?

Based on social identity theory (Tajfel & Turner, 1985) that states that people classify themselves into social categories based on gender, race, age, religious affiliation, etc., the

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[2] Mentoring across difference typically means across gender, race, culture, and/or generational lines. In this memo, I address gender and race.
[3] Mentor was the son of Alcumus and, as an old man, a friend of Odysseus, in whom he entrusted his son and palace when he left to fight the Trojan War. Over time, the word mentor has come to mean, in addition to trusted friend, counselor or teacher, a more experienced person.

similarity and attraction paradigm (Byrne, 1971) suggests that humans tend to be attracted to people who appear most similar on salient demographic characteristics.

Looking within an organizational context, Ashforth & Mael (1989) argued that:

> (a) social identification is a perception of oneness within a group of persons; (b) social identification stems from the categorization of individuals, the distinctiveness and prestige of the group, the salience of outgroups, and the factors that traditionally are associated with group formation; and (c) social identification leads to activities that are congruent with the identity, support for institutions that embody the identity, stereotypical perceptions of self and others, and outcomes that traditionally are associated with group formation, and it reinforces the antecedents of identification (p. 20).

Because of the preponderance of white male full professors in academe, and the increasing percentages of women and minority junior faculty, it is likely that white males will need to mentor across differences if they are to take the newcomers under their wings in a mentor-protégé relationship. Further, this may not come naturally to all members of a majority group.

Challenges in Mentoring Across Differences

Thomas (2001) identified several major obstacles in cross-difference mentoring; four are highlighted here.

- *Negative stereotypes:* Because of unconscious bias (see Correll and Benard, 2006, report), many people hold unfair generalities about a group of people. For example, gender schemas – implicit hypotheses about sex differences/what it means for be male or female in our society – are learned as children and, therefore, difficult to overcome (Valian, 1999). Most people associate math and science with men and the arts with women (Nosek & Benaji, 2002) and eighty percent of (Implicit Association) test takers, including men and women, associate men with a "work" category and women with a "family" category (Cromie, 2003). Race schemas occur just as unconsciously when people form automatic opinions and assumptions merely on race alone.

  Studies have shown that race influences perceptions about competence, warmth, and likeability (Fiske, Cuddy, Glick, and Xu, 2002).

  > Most people reveal unconscious, subtle biases, which are relatively automatic, cool, indirect, ambiguous, and ambivalent. Subtle biases underlie ordinary discrimination: comfort with one's own in-group, plus exclusion of out-groups. Such biases result from internal conflict between cultural ideals and cultural biases (Fiske, 2002, p. 123).

Thus, whether one is reaching across a sex or race divide, one will have to be aware of, and possibly overcome, negative unconscious stereotypes. This becomes especially critical when it is necessary for the mentor to provide criticism to the mentee. In two studies examining the response of Black and White students to critical feedback, Cohen, Steele, and Ross (1999) showed that "Black students who received unbuffered critical feedback responded less favorably than White students… [but that] when the feedback was accompanied both by an invocation of high standards and by an assurance of the student's capacity to reach those standards…Black students responded as positively as White students" (p. 1302).

> Mentors must be willing to give their protégés the benefit of the doubt: they invest in their protégés because they expect them to succeed. But a potential mentor who holds negative stereotypes…perhaps based on race, might withhold support until the prospective protégé has proven herself worthy of investment. On the other hand, when a person of color feels that he won't be given the benefit of the doubt, he behaves in certain ways – for example, he might not take risks he should for fear that if he fails, he will be punished disproportionately (Thomas, 2003, p. 104).

- *Difficulty identifying with the other person:* Mentors and mentees alike may find it difficult, especially at first, finding common ground. Relational demography (Tsui and O'Reilly, 1989) suggests that superior-subordinate dyads with decreasing similarity on six demographic variables reported lower effectiveness, less personal attraction, and increased role ambiguity. Effective mentoring programs will help mentor and mentee bridge apparent demographic differences by getting to deeper dimensions of diversity such as values, attitudes, and beliefs; Ensher and Murphy (1997) showed that mentors and protégés who perceive similar attitudes have more satisfying relationships.

> Close mentoring relationships are much more likely to form when both parties see parts of themselves in the other person: the protégé sees someone whom he wants to be like in the future. The mentor sees someone who reminds him of himself years ago. This identification process can help the mentor see beyond a protégé's rough edges. But if the mentor has trouble identifying with his protégé – and sometimes differences in race are an obstacle – then he might not be able to see beyond the protégé's weaknesses (Thomas, 2003, pp. 104-105).

- *Protective hesitation:* This phenomenon occurs when both parties "refrain from raising touchy issues," in part, because neither party wants to appear prejudiced or biased. For example, a white mentor may find his black protégé to be "abrasive," or a male mentor may find his female protégé to be "pushy," but not say anything for fear of being typecast as stereotyping and racist or sexist. Such traits, however, should be gently brought to the protégé's attention so that possible problems can be overcome before the characteristic becomes an issue for others.

> Protective hesitation can become acute when the issue is race – a taboo topic for many mentors and protégés. People believe that they aren't supposed to talk about race; if they have to discuss is, then it must be a problem. But that mind-set can cripple a relationship (Thomas, 2003, pp. 105).

Such hesitation to speak can work both ways if the protégé is afraid to speak up to her mentor if she perceives sexism or racism, for fear of being labeled a "whiner" or as being "thin-skinned." Her views may be completely valid, but go unsaid and therefore, unaddressed by her protégé who may actually misinterpret her behaviors around the offending party.

- *Fear or skepticism of intimacy:* Because mentor-protégé relationships are by their very nature, personal and involve power (one person is subordinate to another), both parties may erect barriers to intimacy that can, in fact, sabotage the effectiveness of the relationship. When the cross-difference mentoring is racial in nature, some wonder whether then mentor has an ulterior motive or whether the protégé is "selling out his culture" (Thomas, 2001, p. 105).

In order to be beneficial, mentoring relationships need to be close, with the mentor offering four primary types of support: emotional, instrumental, informational, and appraisal (Lobel et al, 1994). Problems can occur when the mentor, in proving emotional support, does or says something that could be construed as sexual harassment, overture, or innuendo (Hurley and Fagenson-Eland, 1996). "Sexual involvement, real or perceived, can produce anxiety and confusion in both the internal relationship between the mentor and protégé as well as in the external relationship between the mentoring dyad and the organization" (O'Neill and Blake-Beard, p. 54).

The key to a successful relationship may rest in boundary management and clarity of roles and expectations. Hurley and Fagenson-Eland (1996) offer numerous suggestions for managing intimacy in cross-gender mentoring relationships including: formalizing mentoring programs, educational and training programs, guidelines, and leadership.

Recommendations

The following recommendations are offered based on an assumption that establishing a formal mentoring program is a good idea, albeit one that is often debated. Formal mentoring programs legitimize/authorize relationships between senior and junior faculty members that might not naturally occur on their own but that are vitally important to the success of the junior faculty member and are also potentially beneficial to mentors. Further, formalizing mentoring is a good idea because it allows institutions to: 1) reward outstanding mentors; 2) adjust the work assignments of mentors – relief from two annual committees (Moody, 2007, p. 17) or relief from teaching or advising; 3) establish clear guidelines and

parameters around this work; and 4) monitor its effectiveness. A formal mentoring program in no way negates or refutes the importance of informal mentoring.[4]

1. **Discuss and determine mentoring approach**
    Departments should determine whether they prefer a dyadic or team approach to mentoring. In large departments, it may be possible to give junior faculty a choice of one mentor or a team approach. In any case, the pros and cons of each approach should be discussed and a determination made as to which best suits the needs and talent in the department.

    In academe, a one-on-one mentor-protégé approach is perhaps the most commonly used mentoring method, but that is not to say it is always the "best" approach. Successful dyads work beautifully because one person is focused on the success of another and the roles can be clearly defined and enacted. However, dyads can be problematic for the reasons listed above in the "challenges" section. If it is decided to try a one-on-one method, it is critical to allow mismatches to be remedied relatively quickly. Boyce et al (2006) use the following language: "a mentee should consider changing mentors if the mentor is clearly and consistently uninterested in her, if the mentor consistently depresses the mentee by undervaluing her abilities, if the mentor displays any other signs of undermining the relationship (e.g., racial, sexual, ethnic or other prejudice), or if there is simply incompatibility" and "a mentee should consider adding a mentor if the current mentor consistently cannot answer questions or offer advice" (p. 3).

    Moody (2004) recommends a mentoring committee of "three enthusiastic senior faculty members. Studies suggest that two of these mentors should be from outside the newcomer's department, because they will not be involved in contract renewals and tenure decisions. The department chair should appoint the third member from the new hire's department." A team of mentors can ensure that all aspects of mentoring occur but the drawbacks are that responsibility and accountability are shared, and therefore, diffused, and the mentee may be confused about to whom to go for what.

    Brown University utilizes a one-on-one approach for research and provides Center Faculty Fellows for teaching mentorship (through the Sheridan Center for Teaching and Learning). "Four senior faculty members, one from each of the academic divisions, serve as the Center's Faculty Fellows. They are responsible for mentoring and consulting with new and junior faculty on their teaching concerns. Throughout the year, the Center provides a variety of opportunities, including the Junior Faculty Roundtable…for new and junior faculty to meet informally with their faculty mentors."

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[4] These topics are explored in the memorandum by Stacy Blake-Beard and Eileen McGowan to Vincent Price, University of Pennsylvania, August 15, 2007, pp. 10-11.

The University of Maryland utilizes a multi-tiered[5] approach to mentoring: Tier 1 – the unit – provides developmental and evaluative mentoring (including senior developmental mentors), and support; Tier 2 – college level – oversees unit/program and provides workshops and seminars on topics such as grantsmanship; and Tier 3 – campus level – provides developmental mentoring programs on topics such as the tenure review process; assures that faculty (particularly members of underrepresented groups) are provided adequate mentoring; and coordinates meetings of senior administrators with junior faculty (Senate Task Force Report, 2005).

Northeastern University (2006-2007) provides a comprehensive mentoring program that allows its six colleges to specify their own mentoring approach as well as allowing a central place for information junior faculty need. On their website, NEU: 1) lays out the tenure process/timeline and provides a link to the faculty handbook, 2) defines mentoring roles, 3) lists senior faculty advisors[6] from whom junior faculty may seek a broad perspective, 4) lists recently tenured faculty who have been tenured

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[5] The first tier is in the unit or program. [NOTE: In cases where units do not hire frequently or where there are few senior faculty with mentoring abilities, colleges might combine mentoring programs between similar units.] This encompasses providing both discipline-specific and evaluative mentoring, supplying senior mentors, and ensuring that new faculty are given sufficient support so that they can grow in their careers and become fully productive and successful faculty.

The second tier is at the college level. The college should oversee the unit programs and ensure they fulfill their goals. In addition, the colleges should provide additional workshops, seminars, and other programs that would cover topics that might be relevant to all units in that college. Such programs might include workshops on teaching, grantsmanship, etc. In all cases, the college programs should be those that are best done with a larger group of faculty, and where faculty from different units and disciplines could share ideas and experiences. Colleges might also provide support for a "faculty club" of non-tenured faculty where these individuals, without the presence of senior mentors or people who potentially do evaluation, can share ideas and experiences among themselves.

The third tier of mentoring comes from the campus in the form of providing information, resources, and assistance appropriate for all tenure-track faculty such as programs on the tenure process, new faculty orientation, meetings with senior administrators, and a wide range of other activities. The campus should monitor the mentoring of faculty from underrepresented groups, and provide additional mentoring. Finally, the campus should develop a mechanism to track how units provide mentoring to junior faculty and monitor the mentoring experience of junior faculty members when they are considered for promotion. More detailed descriptions of expectations and guidelines related to mentoring at each of these three levels follows.

[6] "Senior Faculty Advisors are selected for their broad perspective of the University and its processes as well as for their integrity. They are not expected to develop mentoring relationships with faculty. Junior faculty can call upon Senior Advisors when a broader perspective is desired than what is available in the department. Senior advisors are available to help resolve issues and to provide level unbiased guidance to the faculty member. Senior Advisors are selected based on their broad university perspective and experiences irrespective of their home departments."

in the past five years and have agreed to serve as resources, 5) showcases faculty achievements, 6) provides quick links to important information for junior faculty (e.g., provost's office, office of sponsored research), 7) provides links to "ONTrack" (an e-bulletin containing information about resources for faculty development and opportunities for scholarship and effective teaching), 8) lists a wide variety of resources useful to junior faculty, and 9) provides a calendar of events for junior faculty.

The University of Texas at El Paso, as part of its NSF ADVANCE Institutional Transformation grant, started a formal mentoring program that paired new women faculty with senior faculty members from their college, but not from their department. Due to a shortage of qualified mentors, however, UTEP now matches groups of new faculty women with one or two mentors from their college. This has allowed not only for mentor-protégé relationships to form but also for peer-to-peer mentoring.

Perhaps the most innovative approach of all is being introduced at the University of Massachusetts, Amherst under the leadership of Mary Deane Sorcinelli, a distinguished scholar and practitioner on early career faculty and faculty development. The approach is known as "Mutual Mentoring" (see Appendix C). whereby "early career faculty build robust networks by engaging multiple 'mentoring partners' in non-hierarchical, collaborative, cross-cultural partnerships to address specific areas of knowledge and experience, such as research, teaching, tenure, and work-life balance. These reciprocal partnerships benefit not only the person traditionally known as the protégé, but also the person traditionally known as the mentor, thus building on the idea that all members of an academic community have something to teach and learn from each other.

2. **Select and assign mentors/teams**
    For either a one-on-one or team approach, select associate and/or full professors who a) have the interest, b) have the skills, and c) are willing and able to devote the time necessary to effectively mentor junior colleagues. From this cadre, determine the type and level of mentoring each is willing to provide.

    When determining an appropriate pool of mentors, keep in mind that the qualities of good mentors include: advocacy, accessibility, the ability to provide networks and contacts, and independence (the mentor and protégé should not be in competition with one another) (Boyce at al, 2006).'

    For a one-on-one method, make the names of potential mentors available to junior faculty. In consultation with the junior faculty member and the Department Chair (or designated departmental mentoring guide), appoint a mentor for a designated period of time (typically one academic year), so that the relationship can be assessed at that stage and there is a logical end point whereby mismatches can be addressed and rectified.

Whether there is a team, or one mentor, the important idea is to be sure that everyone knows who is serving in what capacity and to formalize the relationship(s). As Penn guidelines for A&S state, "chairs should ensure that mentorship takes into account both a junior colleagues' interests (i.e., the mentor should be in the same subfield or a closely related one) as well as personal factors (e.g., family issues, experience at American universities, gender, race)."

The pairing or formation of mentoring teams can occur as soon as a new faculty member has formally accepted the position, or within one month from the start date.

3. **Train and support mentors**
   Mentors should receive formal training on: a) the importance of mentoring to the university, college, and department, b) unconscious bias (Correll and Benard, 2006) and understanding and acknowledging gender/race as potential barriers (Thomas, 2001); c) questions mentors are likely to be asked, and appropriate answers; d) mentor and protégé roles; and, e) documenting and evaluating time and process.

a) Importance of mentoring: The Preamble of the Senate Task Force Report (2005) does an excellent job of highlighting the importance of mentoring (see Appendix A). In addition, The University of Pennsylvania (March 23, 2006) has produced its own statement that should be shared with mentors.

b) Understanding unconscious bias and barriers: Faculty mentors should partake of the same training recommended for deans, chairs, and hiring committees in the Correll and Benard, 2006, report. Understanding and acknowledging gender/race as potential barriers (Thomas, 2001) should be included in this training so that all faculty mentors are aware not only of their own subtle bias but also of the barriers faced by men and women of color and white women where they are especially under-represented (as in STEM fields).

> "Minorities tend to advance further when their white mentors understand and acknowledge race as a potential barrier. Then they can help their protégés deal effectively with some of the obstacles. In other words, relationships in which protégé and mentor openly discuss racial issues generally translate into greater opportunity for the protégé" (Thomas, 2001, p. 105).

So that faculty understand the issues in the context of the University of Pennsylvania, the "Minority Equity Report"(May 3, 2005) should be required reading. If there is a similar report on the status of women at Penn, that, too, should be included in background reading/training for mentors.

c) Appropriate Q & A: MIT provides excellent "Questions for Thought" in its Mentoring Booklet (Boyce et al, 2006), see Appendix B for excerpt. Penn departments may wish to develop their own "frequently asked questions" document so that all mentors are not only trained on likely questions but also on good answers.

d) Mentor roles should be clearly specified in writing and discussed with all mentors in workshop settings. Coaching of mentors is a very important part of any effective mentoring program in part because it "enlarges the number who will provide enlightened mentoring" by boosting their competency and confidence and allaying fears they may have (Moody, 2007, p. 17).

The bottom line is that mentors are responsible for providing the maximum opportunity for the mentee to reach his/her potential and achieve success, including enabling the individual to acculturate to the institution (Senate Task Force Report, 2005, p. 4). In doing so, mentors may be asked to play one or more of several key roles in the lives of their protégés. According to Sand et al (1991), mentors are 1) *Friend* (interacting socially, providing advice about people and helping with personal problems); 2) *Career Guide* (promoting the protégé's research development, inclusion in networks, and his/her professional visibility); 3) *Information Source* (providing information about formal and informal – behavioral norms – expectations for promotion and tenure, publication outlets, and committee work; and 4) *Intellectual Guide* (promoting an equal relationship, collaborating on research and publications, and providing constructive criticism and feedback (p. 189). Importantly, mentees may be seeking one, some combination, or possibly even all four types from their mentor(s). Therefore, it is helpful to discuss all roles with mentors.

Boyce et al (2006) recommend that every mentor ask themselves several questions: 1) What should the professional profile of the mentee be?; 2) Where should the mentee be in her career during the first three years?; 3) How can I, the mentor, facilitate this? The mentor should explain the department's criteria for promotion and tenure and impart any flexibility that exists in that schedule; inform other senior faculty of the mentee's progress; and help the mentee develop many options for the future – multiple job paths/opportunities; help the mentee sort out priorities; provide advice on how to deal with difficulties; help get research support; help the mentee say 'no' to certain time demands (pp. 2-3).

At the University of Maryland, "mentors demonstrate a road map for career success and help faculty gain the skills necessary to travel their own career path successfully. Mentors also provide socialization including entry into a disciplinary network. Ideally, the mentor also becomes a sounding board and support, who teaches the 'tricks of the trade' and survival strategies to the mentee. Most often the mentor serves to help the mentee become successful at his/her institution. It is also possible that the mentor will be able to serve as a guide and resource in dealing with the broader scholarly and academic community, both nationally and internationally" (Senate Task Force Report, p. 4).

The University of Michigan's (December 22, 2004) Faculty Mentoring and Community report says that senior faculty can mentor in several capacities: Promoter, Advocate/ Protector, Coach, Challenger (see Appendix D for details).

The Yale (March 2005) model is relatively simple – mentoring should include two dimensions: how to be a good scholar (e.g., how to deepen one's understanding of a topic, participate in scholarly dialogues, get a grant, obtain publication of articles or

research) and how to negotiate the Yale system (e.g., be a good colleague, how to agree or decline to take on obligations such as committee assignments). Likewise, Stanford University (May 27, 2004) guidelines specify counseling (feedback on performance relative to standards for reappointment and promotion) and mentoring (ongoing advice and support regarding scholarship and teaching).

e) Documentation: Just as scholars track their progress in portfolios, they should document time and process for their activities as mentors. They should take a few minutes after each mentoring meeting with their protégé(s) to reflect on the conversation.

4. **Train and support mentees**

Many institutions offer orientation, workshops, seminars, and brown bag lunches for new faculty. These provide excellent opportunities to allow junior faculty to ask questions about mentoring. In particular, those who will be mentored need to understand the institution's mentoring policies and be informed of resources available to them. Just as mentors should receive training on the importance of mentoring, roles, and documentation, so should mentees. Junior faculty should be informed about what they should expect, what it's okay to ask of a mentor, and what it's not okay to do/ask.

The University of Michigan (December 22, 2004) provides guidelines for mentees (see Appendix D). Arizona State University has a *Mentoring Handbook* (Cahill and Blanchard, 2001) developed for women graduate students that includes definitions, questions to ask, checklists and worksheets for meetings, how to handle conflict, and assessment.

The University of Wisconsin (website posting date unknown) mentoring documents include a discussion of mentoring relationships, questions mentors might address, program guidelines, and practical advice for mentors and mentees.

Whatever tools Penn chooses, be sure to make them available to all junior faculty (typically on a Provost Office website).

5. **Establish formal mentoring program policies**

It is best practice to establish written policies that can be incorporated into the *Faculty Handbook*. This does not preclude departments from tailoring mentoring programs to their own needs, but it does ensure consistency, clarity, and accountability.

As discussed above, the best junior faculty development programs integrate professional skill development and focused academic career advising with instrumental mentoring (Daley et al, 2006). Mentoring policies and practices should be developed with this in mind.

One of the most comprehensive mentoring policies of which I am aware is at the University of Queensland in their *Handbook of University Policies & Procedures*

(November 25, 2004). Policy 5.80.19 provides an overview and description of aims and objectives; outlines the mentoring relationship; details mentoring as part of staff development; defines the relationship of mentoring to staff appraisal and performance management; delineates a code of conduct, equity, and confidentiality; specifies principles of best practice; and addresses implementation.

Mentoring policy, or guidelines, typically address several key areas, including: 1) How senior administration is involved (e.g., providing funding for training and support; requiring that deans and chairs understand and discuss the importance of mentoring; communicating with deans and chairs that feedback to junior faculty is crucial to their success and how to document that; requiring mentoring plans/guideline documents from departments for accountability purposes); 2) How high quality mentoring will be ensured across academic units (e.g., providing central resources and a common website; establishing mentor training programs; securing senior faculty willing to serve; establishing guidelines for relief from committees, advising, teaching for mentorship); 3) How the issues of women and minorities will be addressed through mentoring and training on mentoring across difference (e.g., denoting committees and reports on these groups; providing orientation and networking opportunities; training about tokenism, unconscious bias, isolation, and barriers faced); and 4) How departments can monitor workload and progress of junior faculty toward tenure.

At Yale (March 2005), the Women Faculty Forum recommended that: 1) The FAS Dean should make a statement about the importance of junior faculty mentoring; 2) A website about "navigating Yale" be developed; 3) Deans, or a point person for faculty development, develop mentoring programs for all junior faculty (e.g., workshops, dinners, networks, panel discussions) and for women, minorities, and interdisciplinary scholars; 4) The quality of mentoring in departments be assessed through reports to the FAS Dean and faculty development point person; 5) Activity reports of individual faculty be disseminated to the entire faculty of each department so that comparative data can reveal whether tasks and resources are being equitably distributed; and 6) The Administration learn, systematically, from faculty who leave Yale.

6. **Monitor and evaluate mentoring programs**
   True accountability and progress toward goals cannot occur without evaluation. A mentoring audit, by department, should be required. The audit will address outcomes, what worked, what did not, and explore lessons learned so the there can be cross department/school/institution learning and continuous improvement.

   The audit may include:

   a) **A Process Evaluation** which focuses on whether or not a program is being implemented as intended; how it is being experienced; and whether changes are needed to redress any problems (e.g., difficulties recruiting and retaining mentors, high turnover of faculty, and cost of administering the program).

b) An Outcome Evaluation about what effects programs are having. Designs may compare faculty who were mentored to those who were not, or examine the differences between mentoring approaches (e.g., one-on-one, team, mutual/ networks). Information of this sort is essential for self-monitoring and can address key questions about programs and relationships.

c) Mentor-Protégé Documentation is more or less a diary of that which is not confidential, including time spent, the character of the meetings and conversations, reflections about, and agreements made (e.g., work plan, next meeting date(s) set).

Conclusion

Effective mentoring is too important to the success of junior faculty, especially for those in a minority, to leave to chance. Informal mentoring will always occur alongside formal mentoring; however, informal mentoring is not sufficient for several reasons. First, not everyone will receive it. Oftentimes, those who are in a minority may not be selected as protégés and may not seek out the advice of members of the majority. If not chosen to be mentored, junior faculty should not have to be embarrassed by asking. Second, informal mentoring cannot be monitored. Without oversight, there can be no accountability and no organizational learning. Third, junior faculty have come to expect formal mentoring and prefer to work at institutions that provide it. In contrast, formal mentoring can be connected to the strategic objectives of the department, there are established goals and measurable outcomes, there is open access for everyone and strategic pairing or teaming, there can be training support, and leaders can have a positive impact on culture, not only symbolically, but directly.

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Appendix A
Excerpt
Senate Task Force Report on Mentoring and Success of Junior Faculty
University of Maryland
April 6, 2005

I. Preamble – The Issue

Higher education institutions have a major investment in the careers of faculty members. After all, "faculty are an institution's most valuable resource-by far" (Schuster, 1999, p. xiv). For colleges and universities:

The quality of an institution of higher education links to the quality of its professorate-the men and women comprising its academic ranks. To their efforts we can attribute the success of development projects, the advancement of knowledge through research, the rendering of service in and out of the institution, and the conduct of effective teaching. Continued excellence in an institution depends on acquiring high quality faculty and sustaining their work, both substantively and in spirit, over a number of years (Mager & Myers, 1982, p. 100).

It follows that "careful recruitment and support of new faculty is an essential investment in the future of colleges and universities" (Menges & Associates, 1999, p. xvii). When newly hired faculty become productive members of the professorate, the university has made a wise investment. However, there is considerable evidence that colleges and universities are frequently not "reaping the rewards" of their investments. First, research has documented an extremely high attrition rate among new faculty (Ehrenberg, R., Kasper, H., Rees, D., 1991). This includes our University, where the attrition rate is 40%. Second, studies have found that many new faculty members have problematic socialization experiences that impede, rather than foster, a productive career. Third, an elevated level of stress in junior (pre-tenure) faculty has been documented, as has its negative consequences. Finally, the aforementioned problems are particularly of concern because we have entered a period when higher education faces a shortage of highly skilled faculty (Bowen & Sosa, 1989; Hensel, 1991; Finkelstein & LaCelle-Peterson, 1992; Davidson & Ambrose, 1994).

An assistant professor who ultimately achieves tenure and becomes a member of an institution's permanent faculty will, over a lifetime, cost that institution an average of two million dollars in compensation [1] (Brown & Kurland, 1996). Whether such a significant expense proves to be a prudent decision is determined by the faculty member's future productivity and quality in teaching, scholarship [2], and service. A number of studies have concluded that the foundation of a productive academic career is built upon the early experiences of new faculty (Boice, 1991; Fink 1984; Olsen & Sorcinelli, 1992; Sorcinelli, 1988 ; Sorcinelli & Austin, 1992; Turner & Boice 1987).

Traditionally, once faculty members have been hired they are then evaluated at points along the way to tenure to assess their successes and failures as their careers develop. However, little explicit and formal effort has been expended by the university to help faculty

develop in their careers. In essence, in order to achieve success faculty members have had to rely on what they had learned as graduate students, in postdoctoral positions, and from observing others. While junior faculty often do well using this random mixture of experiences, the pressures of expectations in a modern university often go beyond what a junior faculty member is likely to know based on experience and observation, and thus chances of success using this approach decline.

Over the past several years, the University of Maryland (UMD) and other institutions around the U.S. have become increasingly aware of the need for, and potential value of, increased mentoring efforts for junior faculty to help ensure their success. Considering the investment universities make in hiring junior faculty, and the expectations universities have for these people during their careers, an investment in mentoring provides the opportunity not only to help these people achieve success, but also to enhance their capabilities and increase their value to the university far more than if they had been allowed to develop "on their own."

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[1] If we assume a thirty-five year duration of tenure until a normal retirement age, with annual compensation starting at $40,000 (sure to increase with time and inflation), the employing institution incurs a commitment that will doubtless reach two million dollars" (p. 331). Note, in the sciences, this amount can be considerably higher when one considers that start-up costs can easily reach $500,000 or more.

[2] In use of the word "scholarship" we mean all forms of scholarly activities at UMD including research and the creative and performing arts.

Appendix B
Excerpt
Mentoring Booklet
Massachusetts Institute of Technology
August 2006

Questions for Thought:
A Guide for New Faculty and Their Mentors

1. Before Coming to MIT

1.1 General
- How should your time be divided among teaching, advising, fundraising, administration, committee work and other service (departmental, institute and outside), research and consulting? What else?
- How do you get consulting? How much should you do?
- What resources are there at MIT to help you get settled (housing, HALP/CIM loans, child care office. What details do you need to find out about benefits, moving, etc.?
- What MIT publications should you get (Policies and Procedures, Bulletin, Faculty/Staff Directory)?
- What offices should you contact? What mailing lists do you need/want to be on?
- Who are good resource people to ask these and other questions of? Your Administrative Officer (AO)?

1.2 Research and Resources
- Are you responsible for finding your own money? What expenses are you expected to cover? How much will this cost?
- How do you go about getting startup funds? How (if at all) will your summer be funded? How do you buy equipment? What travel support can you expect from your department?
- Do you need to write a proposal before coming to MIT? How soon afterwards?
- How is lab space allocated? How is equipment maintenance paid for? How much support staff time is covered by the department?
- What other labs are available for cross-disciplinary research efforts at MIT? Elsewhere?

1.3 Teaching
- What is the normal teaching load in your department?

2. On Arrival

2.1 General
- Who is your AO (administrative officer)? What is his/her responsibility? How do the mechanics of your department/lab work (e.g., purchase orders)?
- How is your department organized? (Divisions, committees?) How are decisions made?

- What should you expect from your support staff? What fraction of a support staff member's time is typical? What kind of work can you expect from him/her?

2.2 Research and Resources
- How important are grants? How do you get hooked into the grant-writing process? Where should you look? Who can help you to find out where to meet people, to write the best possible proposal, to draw up a budget? How much effort should you be investing in fundraising? What are the tradeoffs?
- Who, if anyone, will "introduce you around" to government funding agencies and others?
- How does ILP (Industrial Liaison Program) work? What can it do for you?

3. Later

3.1 Research and Resources
- What conferences should you go to? Do you need to have papers accepted? How much travel is allowed/expected/demanded? Is it better to go to large conferences or smaller workshops?
- Should you give the papers or should your students? If the latter, how else can you gain the type of exposure necessary for good tenure letters?
- Authorship etiquette: Should you put your graduate students' names on your papers? Should you put them ahead of your own? How important is first authorship? How is alphabetical listing of authors viewed?
- Where should you published? What should you publish? How much / often? Are there quantity/quality standards for promotion? How do journal / chapters in edited collections / (refereed or unrefereed) conferences compare? Should you write/edit a book? Special issue?
- May material published in one place (workshop, conference) be submitted to another (journal)?
- How much new work is necessary to make it a "new" publication? What is the etiquette for reporting prior publication or submission?
- Is it worthwhile to prepare technical reports and send them to colleagues elsewhere?
- Should you give talks within your department? How often? How should you publicize your work within your department? What about your graduate students? How are the colloquia in your department organized?
- Should you give talks at other universities/industrial sites? How often? Where? How important is this? How do you get invited to give such talks?
- Is collaborative work encouraged or discouraged in your department/field? With other members of your department? With international colleagues? With colleagues who are more senior/better known? With junior colleagues/graduate students? Long-standing collaborations, or single efforts? How important is it to have some singly authored papers?
- Should you form a research group? What sorts of activities should the group do, as opposed to you and an individual student?

3.2 Student Supervision
- How important are graduate students? How many should you expect to have? How many graduate students is too many? How much time/effort should you be investing in your graduate students? How much advising should you expect to do?
- How do you identify good graduate students? What qualities should you look for? How aggressive should you be in recruiting them? Do you need to find money/equipment/office space for them? What should you expect from your graduate students? How do you identify a problem graduate student?
- How do you promote your graduate students to the rest of the community (at MIT and nationally/internationally)?
- Similar questions for UROPs: Should you have them? How many? What kind of commitment in time, effort, and resources should you expect to make? What kind of return should you expect?
- What should you keep in files on your students? Remember that you will have to write reviews and recommendations for them.

3.3 Teaching
- What are you expected to teach? Graduate, undergraduate, seminar, lecture, recitation, special topic, service subject?
- Which are the good subjects to teach? Is it good to teach service subjects, or bad, or indifferent?
- Is it good to teach the same course, or stay within a single area, or teach around?
- Is it a good thing to develop a new course? An undergraduate course? A specialized course in your research area?
- How can you use a special topics course to get a new research project off the ground?
- How much time should you spend on your subjects?
- Will you have a teaching assistant for your subject? Who will select him/her? What can you expect a teaching assistant to do?
- Are there guidelines for grading?

3.4 Administrivia
- How much time should you spend advising academic counselees?
- How much committee work should you expect? Which committees should your turn down if asked to serve? How much time should you expect to spend on committee work? Department vs. Institute vs. outside?
- What types of outside service should you do while untenured? Paper and proposal reviewing? Review boards? Journal assistant editorships?

3.5 Review Procedures
- For how long is your appointment? When will you come up for review? What sort of review?
- What is the process (who, what do they look for, how will you hear about it, etc.)? How will this repeat during the pre-tenure years?
- How should you go about finding people to write references for you? How many will you need? From where? International/domestic?

- What is your department/school's official form for your faculty record? Where can you get one?
- What does it include? What other vita information should you keep?
- What should go in your dossier? Should you send copies of congratulatory letters to your department head? Others?
- What types of raises are typical? When will you find out about your raise? How?
- How can you get feedback on your performance?

3.6 Personal issues
- What special resources do your department and the institute have for women? For family issues?
- What policies does MIT have for family and personal leave? Since most of these policies are administered at the departmental level, how are such things handled in your department?
- How visible must one be in the department? Is it OK or detrimental if most work is done at home?
- Who is the ombudsperson and what matters does she deal with?
- How should you record any controversial matters? To whom do you go about disputes?

Appendix C

**The Mellon Mutual Mentoring Initiative**
http://www.umass.edu/ofd/pguide.html

<u>Excerpt</u>

I. Introduction to the Mutual Mentoring Model

In the literature of faculty development, mentoring is frequently cited as one of the few common characteristics of a successful academic career, particularly for women and faculty of color. Yet mentoring, as most of us now know it, has traditionally been defined by a top-down, one-on-one relationship in which an experienced faculty member guides and supports the career development of a new or early career faculty member.

"Mutual Mentoring" distinguishes itself from the traditional model by encouraging the development of a broader, more flexible network of support that mirrors the diversity of real-life mentoring in which no single person is required or expected to possess the expertise of many. Within this model, early career faculty build robust networks by engaging multiple "mentoring partners" in non-hierarchical, collaborative, cross-cultural partnerships to address specific areas of knowledge and experience, such as research, teaching, tenure, and work-life balance. These reciprocal partnerships benefit not only the person traditionally known as the "protégé," but also the person traditionally known as the "mentor," thus building on the idea that all members of an academic community have something to teach and learn from each other.

A typical Mutual Mentoring network may include any or all of the mentoring partners listed below:
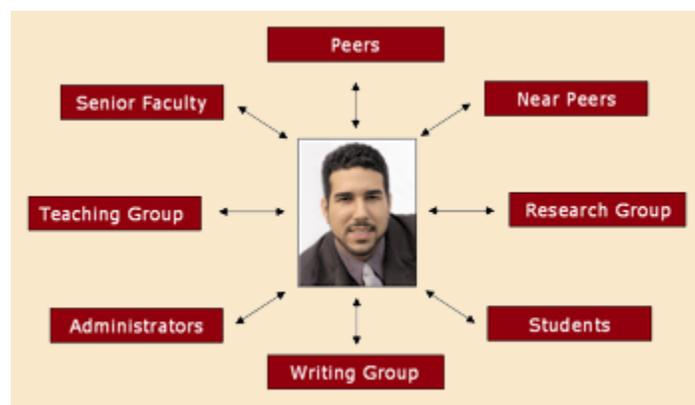
- *One-on-One Mentoring Partners*

One-on-one mentoring partnerships with faculty peers, "near-peers" (such as a recently tenured faculty member), senior faculty members, department chairs, administrators, "hired" mentors such as professional editors, grant writers, or writing coaches; and staff

from campus units such as Academic Computing, the Center for Teaching, the Offices of the Vice Provost for Research, and the Library.

- *Group Mentoring Partners*

Small groups of mentoring partners organized at the departmental, cross-departmental, school/college, or Five Colleges levels that might include peers or near-peers, or blended groups with mentoring partners at all stages of the academic career.

- *Distance Mentoring Partners*

Mentoring partnerships in which the primary mode of communication is technology-enabled, e.g., e-mail, video conferencing, discussion boards, listservs, and/or chat/IM.

Senior Faculty (Mentors)

Senior faculty can mentor in several capacities:

Promoter

- Nominate the mentee for awards and service opportunities that enhance visibility
- Look for symposia/panels on which the mentee can be included
- Assist in creating a "social network" in the department and in the field
- Help mentees find appropriate collaborators

Advocate/Protector

- Help the mentee navigate the "unwritten rules" of academia, e.g., dealing with reviewers, editors, research sponsors, as well as how to avoid pitfalls
- Assist with practicalities of dealing with professional setbacks, such as manuscript/grant rejections, poor teaching evaluations, etc.
- Help ensure that the mentee is not exploited in service or teaching loads
- Become well-versed in current promotion and tenure policies, as well as university resources

Coach

- Evaluate manuscripts and grant proposals prior to submission
- Discuss mentee's ideas and encourage the pursuit of promising lines of research
- Offer guidance for preparing annual reports
- Review curriculum vitae

Challenger

- Provide candid but constructive feedback to mentors who come to you for advice.
- Help junior colleagues expand into new areas and undertake new professional responsibilities, such as serving on an editorial review board.

Junior Faculty (Mentees)

- Take the initiative to learn about the available faculty mentoring resources, including resources and programs in the your department, school, college, academic program, and in central offices of the University.

- Create a relatively broad mentoring network, consisting of people within the department, institution, the field at large, other fields, and other institutions.

- When you encounter a specific problem, seek out one or more senior faculty members who have the expertise to help you.

- Initiate periodic meetings with a small group of faculty peers to address a common interest, such as setting writing goals, discussing research opportunities, sharing teaching experiences, and checking on one another's progress.

- Actively engage in establishing connections with potential senior faculty mentors.

- Act as peer mentors for other junior faculty.

- Identify areas in which you need improvement or need to develop skills, and ask for advice.

- Look for opportunities to interact with senior colleagues and academic leadership both formally and informally.