Culture, Climate, and Recognition of Female Faculty at Missouri S&T

Report and Recommendations
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Executive Summary

This study was completed at the request of a Missouri University of Science and Technology (Missouri S&T) Board of Trustees member and with the endorsement of Chancellor Schrader and Provost Marley. Melanie Mormile, Special Assistant to the Provost for Faculty Affairs, served as my primary point of contact and coordinated the campus visit and other communications.

The primary purposes of this study were to assess the climate for faculty, particularly female faculty and the degree to which the Woman of the Year Award is still serving to recognize successful female faculty at Missouri S&T.

University documents were reviewed and on-campus focus groups and phone interviews conducted. The report summarizes some of the evidence I found most compelling, explicates the conclusions I reached, and offers a series of actionable recommendations for consideration and refinement by the campus community.

I am supremely grateful to Missouri S&T faculty members and administrators who shared their time and impressions with me. My recommendations reflect their insights and passions in ways I hope will advance Missouri S&T female faculty and faculty as a whole as the university reaches toward its vision to become a leading public technological research university.
Recommendations

The first four recommendations deserve immediate attention. The remainder, in no particular order, are ones I am convinced would enhance the success of female faculty, and the university’s strategic position.

1) Use the COACHE faculty survey and best practices to assess and then implement strategies to respond to highest priority items through a continuing oversight committee.

2) Continue the Woman of the Year Award and Celebration. Implement improvements under discussion.

3) Plan and apply for an NSF Advance grant in fall 2016. Consider a joint proposal with other UM campuses to increase impact and funding potential.

4) Establish a formal, ongoing, local, professional development program for department chairs, including immediate launching of formal orientation and support for new and interim department chairs.

5) Vice Provosts and Deans should provide formative feedback to department chairs utilizing periodic online input already being submitted by faculty.

6) Conduct an inventory of family friendly policies and which faculty are taking advantage of them to identify potential gaps.

7) Continue to seek partners among Rolla’s employers for shared childcare services. Conduct an ROI analysis for childcare services that includes attraction and retention of new tenure track faculty and a more diverse faculty as possible returns on investment in child care services. Consider adding these services as priority in strategic plan.

8) Expand to all departments an awareness of the advantages of mentoring and an expectation that all new faculty receive mentoring in some form. Ask department chairs to coordinate (or delegate) these efforts and recognize those who provide mentoring.

9) Continue programs seen by new faculty and many other faculty as being of high quality and impact on faculty lives: Freshman Faculty Program, Educational Technology, the Faculty Center, and interdepartmental mentoring offered by FemFac.

10) Establish a focused professional development program with special focus on associate professors seeking promotion to the rank of full or additional career engagement.
REPORT

Objectives

My objectives for this project are to
a. Assess the culture and climate for female faculty in light of a recent survey done in conjunction with the university's communication and marketing efforts
b. Determine whether the goal of recognizing distinguished female faculty members is best served by continuing the Woman of the Year Award.
c. Make recommendations for actions that could be taken to improve the success of female faculty.

This report summarizes some of the evidence I reviewed and my impressions based on two days of interviews with Missouri S&T faculty and staff on October 19 and 20, 2015 and over the phone before and after that time. I paid special attention to the University’s Strategic plan and the work of the Faculty Recruitment and Retention Council. I spoke with consultants at Simpson Scarborough, Harvard’s Collaborative on Academic Careers in Higher Education to learn about recent and possible faculty surveys, and Steve Graham in UM Academic Affairs regarding ways system resources might fuel Missouri S&T’s gender and faculty-related initiatives.

The successes and experiences of female faculty were my focus, although it is often impossible or unwise to separate their experiences from those of other faculty, and the structures that support them. Often I used the Canary in the Coalmine metaphor as others have done to illustrate the idea that the experiences of under-represented groups can be early signals of critical aspects of organizations.

As requested, but at the risk of being presumptuous, I have offered actionable recommendations for consideration by campus leaders. Some of these can implemented right away; others may require refinement or deserve additional analysis, consultation, and planning. Some require funding, some do not. Even those that are disregarded may stimulate more creative ideas among the campus community. For many reasons, particularly the ambitious faculty recruiting agenda and the refinement of the university vision, continuing to hone an environment that nurtures faculty success and diversity is a smart and necessary strategic move for Missouri S&T.

Context

It was interesting returning to Missouri S&T after having been gone for 16 years and having served two other public universities as provost and vice provost and professor of psychology. So much has changed, yet at the same time some stories in the sessions I conducted seemed to echo virtually unchanged through the many years since my departure in 1999.

1 http://provost.mst.edu/frrc/ http://provost.mst.edu/frrc/
Change was the dominant theme in all the focus groups. The shift in Missouri S&T's traditional proportional funding by UM and the aggressive goals for faculty recruiting and many other initiatives it enables served as a backdrop for the focus groups and recommendations. The recent dramatic increases in enrollment (Fig 1) catapult Missouri S&T toward its strategic enrollment goal and create pressures on faculty and all others in the academic and student affairs divisions as they try to meet student demand with current faculty and staff.

Recruiting of faculty to meet the demand is underway in line with Missouri S&T's Strategic Plan, *Rising to the Challenge*, which calls for the increase of 100 additional faculty. Two newly formed colleges now house the academic departments. The Chancellor, Missouri S&T’s first female chancellor, the provost, a vice provost and dean, and a special assistant to the provost are all relatively new in their positions. The vice provost and dean of the College of Engineering and Computing, another key leadership position, stepped down somewhat unexpectedly in the past few months.

Additional changes emerge from steps are being taken to improve and strengthen policies and processes that lie at the core of the academic mission. Faculty recruiting procedures, position allocations, and faculty compensation are among the many revisions recently completed or underway. Concurrently there have been shifts in staff evaluations and compensation which directly impact faculty who act as supervisors of staff in their departments and centers. There has been a high degree of turnover in these critical supervisory positions in the past year.

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Taken together, there is a lot happening. Even in organizations open to change there can be too much change or change that occurs too quickly. Within higher education, with our loosely coupled units and processes, and expectations for widespread consultation, we struggle to achieve rapid change. Even with the best intentions, accurate and timely two-way communications regularly turn out to be our greatest challenges.

Missouri S&T is a small campus with many informal relationships that support communication, but these have not been adequate for the communication requirements of this dynamic environment. Even though the changes are not as dramatic as changes in a university’s basic mission or following significant budgetary shortfalls might be, many of them strike close to the heart of academic departments. In the absence of a robust set of communications and a change management strategy, even modest changes have required remedial actions which are time-consuming, frustrating for all, and undermine the overall level of trust so critical to accomplishing the objectives of Rising to the Challenge.

Given the rate of change already underway, I offer a word of caution about recommendations in this report: They should be fit within an overall set of campus priorities and plans, and be accompanied by additional intentional communications and consultation so as not to overwhelm an already strained system.

**Net Promoters®: Communications and Marketing Survey**

Missouri S&T’s Board of Trustees demonstrated commendable interest in the experience of faculty when they reacted to the results of a marketing survey done in early 2015 among Missouri S&T's prospective students, current students, faculty and staff. The survey, conducted by Simpson Scarborough, was one of the initial steps in a branding/rebranding of the university. I refer to it as the Net Promoter® survey below.

Net Promoter® is a measure widely used in marketing to discern the satisfaction and loyalty of customers to products. As can be seen in Figure 2 below, it uses a 10-point scale anchored at extremely likely and extremely unlikely, with results summarized and reported in the categories of promoter, passive, and detractor. The promoters, those who check 9 or 10 on a 10-point scale are often the critical focus of marketing professionals. Simpson Scarborough and other firms have found this instrument to be informative for efforts to enhance campuses’ recruiting and retention efforts.

**Figure 2: The scale used to determine Net Promoter® scores**
It is not common to use Net Promoter© survey for the purpose of better understanding internal audiences of faculty and staff. It was the results of this Net Promoter© survey of Missouri S&T faculty however that got the attention of the Missouri S&T Board of Trustees. Simpson Scarborough representatives do claim they rarely see negative results on these surveys and that results for Missouri S&T’s faculty did not conform to that pattern. This prompted the Board to ask for attention to this issue.

To explore these results further I looked at Missouri S&T faculty responses before they were collapsed into the promoter/passive/detractor categories. Those results can be seen broken down by gender (Fig. 3) and college (Fig. 4), two dimensions relevant to the current study.

Faculty responses are highly variable, modal responses being 7 and 8 on a 10-point scale with the majority of faculty saying they would recommend Missouri S&T to prospective faculty and staff members (i.e., their responses were above the midpoint of the scale). This was true overall for males and females, and faculty in both colleges. So, overall faculty are likely to recommend Missouri S&T to prospective faculty and staff.

![Figure 3: Number of Male and Female Faculty Who Would Recommend Missouri S&T to Prospective Faculty or Staff](image-url)
That said, the results do indicate a broad range of responses. I would not expect faculty in general to use the top two points on a 10-point scale of this type. As faculty we are highly trained in critique and analysis and accustomed to providing candid feedback. Even to be called a ‘net promoter’ might be considered offensive to some as it could belie a more nuanced position and our recognition that many things can be improved and all the work we are doing in that regard.

While the overall results may be supportive, there are 28 out of 95 faculty who report they are not likely to recommend Missouri S&T to prospective faculty and staff (i.e., using scale points below the midpoint). There are slightly more females and slightly more faculty from CASB using this negative end of the scale. Indeed in our focus groups we heard a variety of perspectives from faculty. Most but not all faculty feel the support of their department chairs and senior faculty. Some faculty are strained more than others by the dramatic growth in enrollment and its implications for student placement, teaching and advisement. Some feel their research environment is exceptional while others feel they lack critical pieces of equipment. Some faculty feel isolated in Rolla and long for some of the accouterments of a larger or more cosmopolitan town. Others do not. Excitement about Missouri S&T’s potential and future is often tempered by the details of implementation and timing.

These findings and impressions are worthy of follow up. Missouri S&T does not regularly assess the experience of its entire faculty and has no inclusive contemporary knowledge of such. Many institutions that have been in a similar position are taking a new course. Experts
at Harvard's School of Education began in the early 2000s to develop a survey tool that would yield actionable information about the drivers of faculty life under the program title, The Collaborative on Academic Careers in Higher Education (COACHE). COACHE has become a membership organization that offers a survey of faculty with tailored analyses and recommendations for each institution based on the experiences of the over 200 institutions that have used this survey. Comparisons with other similar COACHE institutions are also provided.

The UM System coordinated use of the COACHE survey on all four campuses in 2008 at a time when the survey was only for pretenure tenure track faculty. Figure 5 below illustrates the general trends found in these results for Missouri S&T. The green shading indicates areas (“themes”) for which Missouri S&T faculty responses were the most or second most positive among the five predefined, comparison universities. Deserving of note is that Missouri S&T pretenure faculty perceptions of climate, culture and collegiality were very positive.

Figure 5: COACHE 2008 Institutional Comparisons for Missouri S&T

The longer red bar for tenure points to an area where attention was needed and Figure 6 below details the specifics. Comparing the means for the various questions, the faculty saw tenure decisions being based primarily on performance, and both the tenure process and the criteria for tenure as being clear. These are some of the most important decisions a university makes with respect to faculty and thus these survey findings are worthy of note. At the bottom of the list, indicating a weakness in the tenure-related processes, were the clarity of expectations for faculty in their roles of campus citizen and community member. Knowing this suggests clarifying actions that could be taken by departments and the university to remedy this situation for faculty.

3 http://coache.gse.harvard.edu/
Peer comparisons are also offered and appear in Figure 6 for the 2008 administration. If Missouri S&T were to use the survey in the future, use of these comparisons would depend on the deemed suitability of the comparison group. Since the time the COACHE survey tool was first used by UM, the COACHE collaborative has expanded to more universities including Virginia Tech, Purdue and Iowa State University. Many universities put their results on the web including UM Columbia⁴ and Purdue⁵. The survey now is designed for use by all faculty, adjunct and tenure track, which is seen as a significant plus by Missouri S&T faculty and administrators with whom I spoke.

Comparisons among gender and racial groups are standard parts of COACHE reports as well. The 2008 findings point to many areas where the experiences of males and females were different. When there was a difference, the experiences of females were more negative in almost every instance. These differences can be seen in Figure 6 as M+/F- for gender differences at Missouri S&T and F- for differences with the national comparison group. Interpretation of racial differences (C=faculty of color) in this earlier study may be limited by very small sample sizes. Any future administrations of COACHE would necessitate careful analyses of the samples and any gender and racial differences that might obtain.

Figure 6: COACHE 2008 Detail for Missouri S&T Responses to Questions
Tenure Processes

<table>
<thead>
<tr>
<th>Theme I. Tenure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7a</td>
<td>perception that tenure decisions are based primarily on performance.</td>
<td>4.08</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q19</td>
<td>clarity of the tenure process.</td>
<td>4.03</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q30</td>
<td>clarity of the criteria for tenure.</td>
<td>3.96</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q24</td>
<td>clarity of the expectations for performance as a scholar.</td>
<td>3.93</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q32</td>
<td>clarity of the body of evidence that will be considered in making decisions about their own tenure.</td>
<td>3.87</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q7a</td>
<td>reasonableness of the expectations for performance as a scholar.</td>
<td>3.79</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q23</td>
<td>clarity of the expectations for performance as a teacher.</td>
<td>3.77</td>
<td>-</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td>clarity of their own prospects for earning tenure.</td>
<td>3.67</td>
<td>-</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q16</td>
<td>clarity of the standards for tenure.</td>
<td>3.61</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q25</td>
<td>reasonableness of the expectations for performance as a department colleague.</td>
<td>3.61</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q26</td>
<td>receiving consistent messages from senior colleagues about the requirements of tenure.</td>
<td>3.58</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q55</td>
<td>reasonableness of the expectations for performance as a student advisor.</td>
<td>3.54</td>
<td>-</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q27</td>
<td>reasonableness of the expectations for performance as a community member.</td>
<td>3.46</td>
<td>-</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q28</td>
<td>reasonableness of the expectations for performance as a campus citizen.</td>
<td>3.35</td>
<td>-</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q29</td>
<td>clarity of the expectations for performance as a department colleague.</td>
<td>3.35</td>
<td>-</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q30</td>
<td>clarity of the expectations for performance as a community member.</td>
<td>3.16</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q31</td>
<td>clarity of the expectations for performance as a campus citizen.</td>
<td>2.99</td>
<td>+</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
<tr>
<td>Q32</td>
<td>clarity of the expectations for performance as a community member.</td>
<td>2.93</td>
<td>-</td>
<td>M+/F+</td>
<td>W+/C+</td>
<td></td>
</tr>
</tbody>
</table>

According to the COACHE office, based on the experience of other universities, COACHE works best when ownership for the administration, interpretation and follow up actions is

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⁴ [http://provost.missouri.edu/faculty/coache](http://provost.missouri.edu/faculty/coache)
⁵ [http://www.purdue.edu/provost/initiatives/coache/](http://www.purdue.edu/provost/initiatives/coache/)
shared among faculty and academic administration. The two University of Missouri System campuses (UMC and UMKC) that have made use of the COACHE survey are seen as good examples how the survey can be used because of their regular administration of the survey, dissemination of results to the campus, leadership by ongoing largely faculty committees, and actions they can link to feedback from the surveys.

If Missouri S&T decided to become a COACHE university, to assure the full benefit of its participation Missouri S&T would be prudent to form such a leadership committee and commit to sharing and responding to the results of the survey. A group of faculty with staff support from Institutional Research and Human Resources, appointed by the provost or president, with regular reports expected by the Faculty Senate and Board of Trustees, would be a way to keep essential faculty issues and support as top priorities.

The quality and comprehensiveness of the COACHE survey of faculty would make use of other surveys (e.g., Net Promoter) unnecessary when trying to understand the experience of faculty. Missouri S&T would have good information about its faculty's experience and a national context within which to interpret it.

**Recommendation:** Use the COACHE faculty survey and best practices to assess and then implement strategies to respond to highest priority items through a continuing oversight committee.

### Woman of the Year Award

Another purpose of this project is to ask whether the Woman of the Year Award (WOTY) is still viable and an optimal way to be recognizing the accomplishments of Missouri S&T’s most talented and dedicated faculty in line with the criteria which appear in Figure 7. Trustee Tang has had a particular interest in Missouri S&T faculty, and thanks to her generosity, an annual award recognizes a female faculty member for her notable contributions to the campus.

The award ceremony is now being coordinated by University Advancement staff and seen as significantly improved by their efforts. Leach Theatre serves as the venue and light refreshments have replaced a sit down meal, making it possible to have the event be free for all attendees, thanks to the contributions of Trustee Tang.

The list of recipients of the WOTY (Fig. 8) includes distinguished Missouri S&T faculty from many departments and both colleges. Winners are

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**Figure 7: Criteria for Woman of the Year Award**

Through interaction with all elements of the university community, she exemplifies the abilities and qualities that improve the campus climate for women.

She serves as a role model by her:

- Work on issues that affect the quality of women’s lives at Missouri S&T
- Commitment to student learning
- Support for diversity
- Active participation in student and faculty mentoring
- Achievement in her professional field
- Willingness to speak out on issues that affect the quality of women’s lives at Missouri S&T
predominately associate and full professors. Award criteria have been recently reviewed by the current WOTY committee and details of the process tweaked to promote broader impact and a smooth selection procedure. The annual solicitation and review of nominations are carried out by the award committee, which includes a few past awardees and female and male professors from the campus community. Criteria and nomination procedures are available on the provost's website, along with other awards for faculty.

At the time the award was instituted, there were fewer than 30 tenure track females and only a few female full professors. Among the recipients of prestigious campus awards, there were few females. Communicating to the campus generally and female faculty in particular the value of and appreciation for the work of female professors was a fundamental reason for this award.

Today there are more awards given to faculty than was true in 1997 (Fig 9). The belief that overall there are a sufficient number of awards for faculty is widely shared and probably accurate. Given the focus of my work was on gender representation, I looked at award winners by gender (Fig 10). Since 2003 there were 291 instances of these awards being given to faculty (can include multiple awards to one recipient). During this time, 22% of the tenure and tenure track faculty were female and females received 19% of the awards (see Fig 10). Relative to their proportion among the regular faculty, females are found in a greater proportion among the reward recipients of the teaching award; for all other awards the proportion of female award winners was less than 22%. The award given to nonregular faculty (Faculty Achievement Award) was awarded 19 times to a female and 14 times to a male (Fig 11. See Appendix B for gender breakdown of nonregular faculty). Figure 12 shows the awards given in the recent year where female awardees were again concentrated in teaching and in the achievement award for nonregular faculty.

Looking across all the awards, females are being recognized. They are not receiving the most prestigious awards in the proportion with which they are represented in the faculty however. I steered many focus group conversations toward the awards and this discrepancy and learned there is a general satisfaction with the awards and little sense that there was gender bias in the awards. The award committees feel the process is fair and they do not formally review the awards or the procedures for inadvertent disparities.
Current and former committee members of various committees that recommend award winners did note large differences in the quality of dossiers supporting nominations, which they felt resulted from the efforts of particular chairs or skilled nominators and might advantage males only because of the gender proportions in those departments. Providing more guidance and examples of successful nominations to new chairs and nominators was seen as a constructive way to address these discrepancies, a direction I recommend in the chair professional development section below.

Figure 9: Major Awards for Missouri S&T Regular Faculty

<table>
<thead>
<tr>
<th>Regular Faculty Awards</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Faculty Excellence Award</td>
<td>recognizes faculty members who have demonstrated sustained excellence in all three missions of the institution: teaching, research and service. 22 females, 120 males</td>
</tr>
<tr>
<td>The Faculty Research Award</td>
<td>recognizes faculty members who have demonstrated excellence in research and scholarship. Awards are given based on the significance of the contributions of the individual in the preceding two years, as well as the long term impact of the individual's research. 6 females, 44 males</td>
</tr>
<tr>
<td>The Faculty Teaching Award</td>
<td>recognizes faculty members who have demonstrated excellence in teaching-related activities. Nomination packages include student and peer evaluations of teaching effectiveness and other supporting documentation of pedagogical innovation and effectiveness. 17 females, 23 males</td>
</tr>
<tr>
<td>The Faculty Service Award</td>
<td>recognizes faculty members who display exemplary, sustained service to the university and their profession. The intent of the award is to honor outstanding citizens of the university for their commitment and service. The nomination and selection of individuals for the award is based on any combination of service to the University and the individual's profession. 5 females, 21 males</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non Regular Faculty Awards</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Faculty Achievement Award</td>
<td>recognizes non-regular faculty who have demonstrated sustained excellence in the categories of teaching or research or service. The nomination and selection of individuals for the award shall be based on teaching or research or service to the university and to the individual's profession. 19 females, 14 males</td>
</tr>
</tbody>
</table>
Figure 10: All Regular (T/T) Faculty (Fall)

Figure 11: Faculty Award Recipients Since 2003 (or Inaugural Year)
Focus Group Commentary

The Woman of the Year Award was discussed in about half the focus groups, culminating with a conversation with most of the prior award recipients. There are some who have questioned the appropriateness of an award that goes only to women or only to tenured or tenure track women. Both of these issues were discussed at length with many groups; only previous winners and others who had been involved in the award committee had strong feelings, which trended toward leaving the award alone believing that it still served to recognize and celebrate women in a special way.

Also discussed was whether the small pool of applicants was indicative of a lack of interest or value and the possibility of digital submission of materials. There are efforts underway to better announce and encourage applications, working under the assumption there are still deserving recipients.

Opening the award to nonregular faculty had both supporters and detractors. Individuals from both perspectives recognized the significant contributions made by nonregular faculty and that even when different, were of comparable value to those made by tenured and tenure track faculty. The idea of having one award with separate criteria for nonregular and tenure

Figure 12: Faculty Award Recipients in 2014

<table>
<thead>
<tr>
<th>Category</th>
<th>Achievement</th>
<th>Excellence</th>
<th>Research</th>
<th>Service</th>
<th>Teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>5</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Women</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
track faculty did not receive strong support. The idea of alternating the awards between tenure track and nonregular faculty across years was dismissed.

A second type of award that would be given at the same time as the WOTY was discussed at length. This award, given the moniker in our discussion “The Climate Changer,” could be given to any member of the campus community who made notable contributions to the climate or success of women. A nonregular faculty member, student or student affairs professional who had made a significant difference for women in the past year are examples of individuals who might be nominated for this award. Concerns over the dilution of the Woman of the Year award and questions about whether there were already other awards that served this purpose suggested this is not something to pursue at this time.

**Recommendation: Continue the Woman of the Year Award and Celebration. Implement improvements under discussion.**

It is my sense these specific recommendations align well with ongoing analyses and work of those closest to the awards. I was impressed by their ongoing dedication.

1) Continue current award, criteria, and eligibility criteria (i.e., women, tenured or tenure track only). Continue to award once a year
2) Continue the celebration ceremony that includes a talk by the previous year’s award winner on a topic of her choice and delivered in the brief 12 minute format.
3) Consider expanding the celebration to include a scholarly component or a report on the status of female faculty at Missouri S&T.
4) The “free lunch” and broad invitation to the campus, including students, should be continued.
5) Previous award winners should work with department chairs and other to assure that worthy individuals are being nominated.
6) The human resources unit or similar group should explore the other existing awards for which nonregular faculty, staff or students who positively impact the climate and success of women at Missouri S&T are eligible. Based on those results, gaps or opportunities may be identified and deserve a response.
7) After the report is received and another year of WOTY nominations are received, the Women of the Year committee should reconsider the Climate Changer or similar concept as a way of being inclusive and celebrating achievements of those who are influencing in positive ways the climate and/or achievement of women or an increasingly diverse faculty.
8) Implement a digital submission process.
9) Track the recipients of major campus awards to look for undesirable disparities and consider whether changes are needed in the awards or procedures, a practice adopted by some institutions supported by NSF Advance funds.6.

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6 A good example is the work done at University of Michigan [http://advance.umich.edu/good-practices.php](http://advance.umich.edu/good-practices.php)
There may also be a discipline bias or external funding bias that is justified by the priorities of the institution or the concentration of graduate programs in particular departments and college. That said, considering overall faculty recruiting, retention, and success, there may be value in spotlighting an even broader range of faculty contributions. If this were done ‘in addition to’ rather than ‘instead of’ it could be a very positive thing.

Other Recommendations

Advance Grant

Missouri S&T should revive its efforts to secure funding under the National Science Foundation’s Advance Grant which provides funding to:

“(1) to develop systemic approaches to increase the representation and advancement of women in academic STEM careers;

(2) to develop innovative and sustainable ways to promote gender equity in the STEM academic workforce; and

(3) to contribute to the development of a more diverse science and engineering workforce.” 7

Today these grants fund programs that catalyze self-analysis or transformation of individual STEM disciplines, campuses, or systems as well as coalitions of similarly motivated institutions wanting to effect change. Through Advance, NSF also seeks to expand our national understanding of gender equity and success in the academic STEM disciplines.

Over 100 universities and colleges across the U.S. have been funded. Programs or analyses first catalyzed by Advance grants have become the foundation for changes that have promoted the success of female faculty in particular and the inclusiveness of STEM fields as a whole. Missouri S&T belongs among the institutions funded by this program, a fact also recognized by the FUMRR committee in its recommendations and in the work of some of its members in preparing previous proposals.

One possibility that emerged in our conversations was that the four campuses of the UM System together seek Advance funding. This might increase the possibilities of funding and leverage shared resources across the various engineering and science departments in the system. Applications are due in the fall so now would be an opportune time to begin planning for a fall 2016 application.

7 http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383
Given the number of junior faculty being employed at Missouri S&T, a UM collaboration across campuses may also build networks that result in collaborative research and teaching, compensating for some of the limitations of the Rolla campus’ size and location. The proposal preparation process alone might create informal networks for some faculty, including faculty of color and female faculty, who might otherwise feel somewhat isolated personally and/or professionally. Of course Missouri S&T faculty expertise and foci could add significant depth and therefore competitiveness to a UM system proposal.

**Recommendation:** Plan and apply for an NSF Advance grant in fall 2016. Consider a joint proposal with other UM campuses to increase impact and funding potential.

**Department Chairs Professional Development and Training**

There has been significant turnover in those occupying Missouri S&T's department chair positions. Orientation for these individuals is absolutely critical. Even long serving chairs are wrestling with the implications of the new college structures, leaders, and critical policies being implemented (e.g., HR award, faculty pay). Additionally, chairs are the ones who must orchestrate responses to enrollment changes with their faculty and budgets.

The provost and vice provost and deans have been working directly with chairs regarding these changes, but there are still large gaps in understanding. Given the number of changes underway and many leadership transitions, such gaps are understandable but deserve immediate attention. Tighter collaborations and consultation procedures should be put in place. Of course once vice provost and deans are in place in both colleges, their efforts will further enhance the two-way communications necessary for implementing change at this pace. The CASB is a case in point where chairs are feeling the benefit of an effective vice provost and dean in their understanding of many changes in progress and their roles within those changes. The CEC is ripe for a leader of equal caliber.

Many faculty, including some new faculty, heralded the good work and strong support of their department chairs. Even faculty serving on committees for P&T and faculty awards noted the stellar work of some chairs in preparing dossiers and nominations of their faculty. The work of these chairs should be commended and become an expectation for all chairs so faculty in all departments are on more equal footing in campus-wide competitive/comparative processes. Providing examples of best practices and coaching all chairs through these processes would be a worthwhile subject within the professional development of chairs.

Local professional development sessions could be supplemented by sending department chairs to disciplinary-based department chair conferences early in their tenure. This is already happening in some instances. Learning the nuances and variety within disciplinary reviews and establishing a network for consultation on Department chair matters can be game changing. Moreover, given all the recruiting of faculty and administrators at Missouri
S&T, there is a constant need for candidate referrals and assessments that can emerge from a vibrant professional network of other leaders.

**Recommendation:** Establish a formal ongoing local professional development program for department chairs, including immediate launching of formal orientation and support for new and interim department chairs.

**Department Chair Formative Evaluations**

A system is currently in place for each faculty member to evaluate the performance of his or her chair every two years. There has not been regular review of those evaluations by vice provost and deans or the provost. Formative feedback to individual chairs and an understanding of the overall effectiveness of processes within the academic division can be gleaned from the evaluations provided by faculty. Reducing the unplanned and unwanted turnover of chairs, as well as improving chairs’ (and departments’) opportunities for success, should be the primary objectives for these formative conversations. Current chairs could be asked to help construct a process that would be most helpful for the orientation and development of department chairs. It could be very helpful if chairs and vice provost and deans saw this as an exercise in shared problem-solving on behalf of the departments and chairs’ leadership of their departments.

**Recommendation:** Vice Provost and Deans should provide formative feedback to department chairs utilizing periodic online input already being submitted by faculty.

**Family Friendly Policies**

Family friendly policies were identified as essential by most of the focus groups when participants were asked what Missouri S&T could do to better support female faculty. Such policies can support both male and female faculty with children, as revealed in an excellent study of University of California faculty.8 That research, not surprisingly, showed careers of faculty with children are impacted by children, with the impacts on females’ careers being greater.

Aside from difficulties with the quality and availability of childcare (see next section), the current portfolio of family friendly policies was deemed appropriate by those who knew about them. Not everyone knew details of the policies though, including some parents. I heard two stories of female faculty members being discouraged from taking advantage of parental leaves, a problem seen in industry as well. As Missouri S&T and the UM system continue to develop and communicate about these favorably perceived policies, the policies could become a competitive advantage given growing importance of family friendly policies

8 [http://ucfamilyedge.berkeley.edu/workfamily.html](http://ucfamilyedge.berkeley.edu/workfamily.html)
to those in their twenties and early parts of their careers. Along the same lines, in the recruiting of new faculty, it may be possible for Missouri S&T to leverage the faculty perception of departmental and college cultures as being supportive of faculty with children if it is still found to be a distinctive strength of Missouri S&T as it was when the COACHE survey was last administered.

**Recommendation:** Conduct an inventory of family friendly policies and which faculty are taking advantage of them to identify potential gaps in communication or support.

### Childcare Arrangements

Extensive exploratory work has been done in planning for and seeking partnerships to provide high quality day care for Missouri S&T faculty, staff and students. The need for quality childcare, without a religious focus, to which faculty would have ready access, echoed throughout the day in meetings with chairs, dean and vice provosts, and faculty. Often this was in reference to hiring female faculty although research suggests this is increasingly a concern of all faculty parents and department chairs recruiting new faculty.

As mentioned above, a family-friendly environment may already be a differentiator for Missouri S&T. The 2008 COACHE survey showed pretenure faculty feeling very supported by their colleagues in their role as parents. Given the number of new faculty being recruiting over the next few years, also making a commitment to childcare would be a bold statement in support of those new faculty.

Establishing partnerships with other large employers in town may be a means of growing an affordable care facility to which faculty might have priority access. Discussions along these lines have been undertaken but no suitable agreement reached. Quality childcare is expensive. Given Missouri S&T’s lack of academically-related programs and traditional aged student body demographics, a decision to move forward on childcare services would need to be based on meeting the needs of faculty and staff so as to better reach the university’s strategic goals.

An analysis of the costs has been done by Missouri S&T faculty and costs deemed too high to be feasible by the University. Given how important the childcare issue is to current faculty and its potential positive contribution to recruiting and retaining new faculty who are or may be considering becoming parents, this issue deserves continued investigation. Moreover, it may be possible for Missouri S&T to leverage itself as a ‘family friendly’ campus as it seeks to recruit best in class faculty.

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9. 2008 Missouri S&T COACHE survey
10. [http://web.mst.edu/~leabi/childcare/Pdf/](http://web.mst.edu/~leabi/childcare/Pdf/)
12. [http://ucfamilyedge.berkeley.edu/toolkit.html](http://ucfamilyedge.berkeley.edu/toolkit.html)
My sense is that further analysis of costs and potential partners by an expert in childcare center costs and partnerships would be worth the investment of some resources to identify true costs, learn of creative approaches working elsewhere, and recommend alternatives for consideration. With this more solid information campus leaders would be better positioned to conduct an ROI analysis and to position childcare within the multitude of benefits designed for faculty and staff. Seeing childcare within those competing priorities and understanding how a childcare center could impact early career faculty or those deciding whether to come to Missouri S&T may make a strategic direction clear. If a suitable childcare strategy is identified, whether partnership, stand alone or through negotiated agreements, it could be included as one of the actions being taken to position the university to compete for faculty, retain them, and support them in these early stages of their careers.

**Recommendation:** Continue to seek partners among Rolla’s employers for shared childcare services. Conduct an ROI analysis for childcare services that includes attraction and retention of new tenure track faculty and a more diverse faculty as possible returns on investment in child care services. Consider adding these services as priority in strategic plan.

**Mentoring**

Mentoring from departmental colleagues and in some instances others from around campus were seen as strengths of Missouri S&T by the majority of pretenure faculty. This is a strength worth celebrating. Generally, pretenure faculty reported their colleagues volunteered advice and/or were receptive to requests for assistance. Often this mentoring was informal with an elaborate formal mentoring programs documented in only a few departments (cf., Civil Engineering, Biology, Business and Information and Technology). Very much appreciated by these new faculty were experienced faculty who offered and provided feedback on proposal drafts and who extended to new faculty invitations to become part of their funded projects.

An inventory was recently made by the strategic planning coordinator of the current mentoring programs for use in strategic planning. This knowledge could be a resource for departments or colleges wishing to tweak their own procedures and for the provost to commend departments with mentoring programs and/or that show evidence of good mentoring. Vice provost and deans should encourage departments to discuss the importance of mentoring if they are not already doing so. The literature suggests mentoring can be a powerful force but it does not point to a particular model as best. Thus supporting the current effective efforts, creating the expectation that all departments provide for some mentoring, and then allowing its manifestations to grow organically is my recommendation.

The group of female faculty called FemFac carries out mentoring among interested female faculty across disciplines, covering topics from P&T dossiers to handling departmental politics and childcare. Not all female faculty participate, but there were a number of very positive reports from both senior faculty mentors and the recipients of their mentoring. Those who contribute to this effort should be recognized as well.
**Recommendation:** Expand to all departments an awareness of the advantages of mentoring and an expectation that all new faculty receive mentoring in some form. Ask department chairs to coordinate (or delegate) these efforts and recognize those who provide mentoring.

**Programs Supporting Faculty**

Among faculty participating in focus groups were many early to midcareer faculty. From them I heard frequently about the effectiveness of some Missouri S&T programs supporting faculty, particularly the Freshman Faculty Orientation, the Center for Educational Research and Technology Innovation (CERTI), and FemFac-sponsored interdepartmental mentoring of female pretenure faculty. From those who participated in the Freshman Faculty Orientation program for first year faculty, for example, I consistently heard about its positive impacts. The information shared and opportunities to network with other newcomers were seen as invaluable. It was pointed out that given the number of new and interim department chairs this orientation program can add continuity and fill in gaps as new faculty assume their responsibilities amidst leadership changes at departmental and college levels.

Presently this program is for tenure track faculty only. Having a second program for nonregular faculty is something that could also be considered, as they come to play an even greater role in the educational processes and accommodation of enrollment growth.

**Recommendation:** Continue programs seen by new faculty and many other faculty as being of high quality and impact on faculty lives: Freshman Faculty Program, Educational Technology, the Faculty Center and interdepartmental mentoring offered by FemFac.

**Midcareer Female Faculty**

There are Missouri S&T female faculty whose careers have been very successful, by almost any measure. There are others who feel their professional careers have been hijacked by a relative lack of resources or by rapidly increasing enrollments and the large lower division sections they teach. The focus group with these experienced and dedicated female faculty revealed their frustration and desire for changes.

Years ago Missouri S&T used an approach that might be effective with these individuals: a combination of a workshop and individual coaching sessions. Faculty interested in participating could attend the workshops and then develop individual plans in one-on-one coaching sessions. Involving department chairs could be a nice addition to facilitate realistic insight and continuity for the faculty member and her department.
The group I spoke with has some unique needs stemming from their experiences as women at Missouri S&T, which would justify having a female-only program. However, if the focus were not predominantly on gender issues, the program should be open to male associate professors with similar interests.

**Recommendation:** Establish a focused professional development program with special focus on associate professors seeking promotion to the rank of full or additional career engagement.

**Conclusion**

In many ways Missouri S&T is at a crossroads. Strategic directions are being implemented that leverage the strengths of the campus and doing so in ways that meet the needs of Missouri and our increasingly technologically-based world. Missouri S&T is attracting an even greater number of talented students, including many international students. The dedication of so many Missouri S&T faculty to the mission and to students that I remember so well is still palpable.

Looking forward, female faculty are certain to play an even more prominent role at Missouri S&T. The recommendations of this report are intended to position Missouri S&T for that future by establishing a solid, ongoing, and shared understanding of the experience of faculty in areas critical to the academic mission and the retention and success of faculty. The proactive use of the COACHE survey can be a catalyst for sustained understanding and action on behalf of faculty. The leadership committee proposed herein for ongoing coordination of this survey could become a model for evidence-based and timely responses to many issues critical to faculty life and work at Missouri S&T.

The other recommendations I offer have the potential to further support and advance the success of female faculty, and possibly the work and experiences of all faculty. Most of these recommendations have already been the subject of discussion among campus groups. All have sufficient support and likelihood of success in my judgement to warrant further consideration and inclusion in short or long term campus priorities, possibly in modified form. Recruiting and retaining faculty has already been established as a strategic priority of the institution. These recommendations help to support that priority. Evidence I reviewed and conversations in which I participated point to the potential to have the support and success of faculty at Missouri S&T be a strategic differentiator in the minds of the high caliber faculty the university is seeking. Some of this evidence however is dated and worthy of updating through a new administration of COACHE and, if still true, systematically communicated to potential faculty and those involved in recruiting them.

Another differentiator for Missouri S&T in the marketplace for new faculty is growth at a time when many institutions are contracting. Growing the faculty and student body distinguishes Missouri S&T in very positive ways. Managing that growth internally and the multitude of other changes that accompany it, as well as implementation of an ambitious
strategic plan, are demanding continuing attention. Effective two-way communications have to be a priority so Missouri S&T can capitalize on successes it recruits and further strengthens the processes supporting the success of an expanded and top notch faculty.
## Appendix A - Tenure Track Faculty by Gender

### Tenured and Tenure-Track Faculty by Gender and Rank  
**Fall Semester**

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**Notes:**
- Numbers represent the count of faculty members.
- Data reflects the academic year from 2005 to 2014.
## Appendix B—Nonregular faculty by gender

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Example taken from 2008 COACHE report for Missouri S&T pretenure Tenure Track showing specific questions for one of the six sections with overall, gender and faculty of color breakdowns. This type of information would be available for all faculty with the current version of the COACHE.

### Appendix C - COACHE

#### Table 1. Policies rated by faculty as important and effective

This table shows, for each of 16 policies, 1) the number of faculty who provided a valid response for both the importance and the effectiveness questions (34a and 34b); and 2) the percent of your junior faculty (overall and grouped by gender and race) who rated the policy as fairly or very important to their success, and fairly or very effective. The policies and practices with the highest percent of faculty with this response pattern can be viewed as exemplars of successful policies at your institution.

<table>
<thead>
<tr>
<th>Policy or practice for junior faculty</th>
<th>Valid n</th>
<th>Overall</th>
<th>Males</th>
<th>Females</th>
<th>White Faculty</th>
<th>Faculty of Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel funds to present papers at professional meetings</td>
<td>117</td>
<td>78% (1)</td>
<td>42% (1)</td>
<td>74% (1)</td>
<td>78% (1)</td>
<td>80% (1)</td>
</tr>
<tr>
<td>Periodic, formal performance reviews for junior faculty</td>
<td>113</td>
<td>63% (2)</td>
<td>58% (2)</td>
<td>66% (2)</td>
<td>59% (2)</td>
<td>74% (2)</td>
</tr>
<tr>
<td>An upper limit on teaching obligations</td>
<td>113</td>
<td>59% (3)</td>
<td>72% (3)</td>
<td>43% (3)</td>
<td>59% (3)</td>
<td>61% (3)</td>
</tr>
<tr>
<td>Informal mentoring</td>
<td>105</td>
<td>48%* (4)</td>
<td>63% (5)</td>
<td>30%* (6)</td>
<td>44%* (6)</td>
<td>54%* (5)</td>
</tr>
<tr>
<td>An upper limit on committee assignments for tenure-track faculty</td>
<td>108</td>
<td>48%* (4)</td>
<td>51% (5)</td>
<td>44% (4)</td>
<td>44%* (4)</td>
<td>59%* (5)</td>
</tr>
<tr>
<td>Written summary of periodic performance reviews for junior faculty</td>
<td>108</td>
<td>43% (6)</td>
<td>48% (6)</td>
<td>46% (6)</td>
<td>43% (6)</td>
<td>58%* (4)</td>
</tr>
<tr>
<td>Paid or unpaid research leave during the pre-tenure period</td>
<td>108</td>
<td>50%* (7)</td>
<td>40% (7)</td>
<td>23% (11)</td>
<td>35% (9)</td>
<td>40%* (7)</td>
</tr>
<tr>
<td>Paid or unpaid personal leave during the pre-tenure period</td>
<td>104</td>
<td>50%* (7)</td>
<td>43% (8)</td>
<td>30%* (8)</td>
<td>38% (7)</td>
<td>34% (12)</td>
</tr>
<tr>
<td>Time reviews of teaching or research/creative work</td>
<td>104</td>
<td>45%* (7)</td>
<td>45% (9)</td>
<td>29% (10)</td>
<td>29% (10)</td>
<td>53% (7)</td>
</tr>
<tr>
<td>Stop-the-clock for parental or other family reasons</td>
<td>62</td>
<td>33%* (10)</td>
<td>29% (12)</td>
<td>30%* (8)</td>
<td>2%* (10)</td>
<td>27%* (14)</td>
</tr>
<tr>
<td>Formal mentoring program for junior faculty</td>
<td>104</td>
<td>27%* (11)</td>
<td>31%* (10)</td>
<td>22% (12)</td>
<td>18% (12)</td>
<td>48%* (8)</td>
</tr>
<tr>
<td>Professional assistance for improving teaching</td>
<td>100</td>
<td>27%* (11)</td>
<td>23% (14)</td>
<td>32% (7)</td>
<td>21% (11)</td>
<td>40%* (9)</td>
</tr>
<tr>
<td>Professional assistance in obtaining externally funded grants</td>
<td>98</td>
<td>22% (13)</td>
<td>27% (13)</td>
<td>15% (14)</td>
<td>17% (13)</td>
<td>23% (12)</td>
</tr>
<tr>
<td>Childcare</td>
<td>60</td>
<td>20%* (14)</td>
<td>31%* (18)</td>
<td>10% (15)</td>
<td>12% (15)</td>
<td>40%* (8)</td>
</tr>
<tr>
<td>Spousal/partner hiring program</td>
<td>61</td>
<td>13% (15)</td>
<td>16% (15)</td>
<td>18% (15)</td>
<td>15% (14)</td>
<td>20% (15)</td>
</tr>
<tr>
<td>Financial assistance with housing</td>
<td>78</td>
<td>3%* (16)</td>
<td>6% (16)</td>
<td>0% (16)</td>
<td>2% (16)</td>
<td>0% (16)</td>
</tr>
</tbody>
</table>

#### Table 2. Policies rated by faculty as important, but ineffective

This table shows, for each of 16 policies, 1) the number of faculty who provided a valid response for both the importance and the effectiveness questions (34a and 34b); and 2) the percent of your junior faculty (overall and grouped by gender and race) who rated the policy as fairly or very important to their success, but fairly or very ineffective (or not offered) at your institution. The policies and practices with the highest percent of faculty with this response pattern should be targeted for improvement.

<table>
<thead>
<tr>
<th>Policy or practice for junior faculty</th>
<th>Valid n</th>
<th>Overall</th>
<th>Males</th>
<th>Females</th>
<th>White Faculty</th>
<th>Faculty of Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional assistance in obtaining externally funded grants</td>
<td>98</td>
<td>51% (1)</td>
<td>44% (2)</td>
<td>60% (2)</td>
<td>58% (2)</td>
<td>40%* (2)</td>
</tr>
<tr>
<td>Childcare</td>
<td>60</td>
<td>50% (2)</td>
<td>25%* (1)</td>
<td>64% (1)</td>
<td>59% (1)</td>
<td>29%* (4)</td>
</tr>
<tr>
<td>Paid or unpaid research leave during the pre-tenure period</td>
<td>88</td>
<td>40% (3)</td>
<td>40% (3)</td>
<td>58% (3)</td>
<td>50% (3)</td>
<td>45% (11)</td>
</tr>
<tr>
<td>Financial assistance with housing</td>
<td>78</td>
<td>43% (4)</td>
<td>47% (1)</td>
<td>39% (7)</td>
<td>48% (4)</td>
<td>34% (3)</td>
</tr>
<tr>
<td>Formal mentoring program for junior faculty</td>
<td>107</td>
<td>30%* (5)</td>
<td>27% (8)</td>
<td>54% (6)</td>
<td>44% (5)</td>
<td>26%* (5)</td>
</tr>
<tr>
<td>Spousal/partner hiring program</td>
<td>61</td>
<td>30%* (6)</td>
<td>35%* (4)</td>
<td>40% (6)</td>
<td>42%* (6)</td>
<td>24%* (7)</td>
</tr>
<tr>
<td>An upper limit on committee assignments for tenure-track faculty</td>
<td>105</td>
<td>35%* (7)</td>
<td>25% (9)</td>
<td>47% (5)</td>
<td>41%* (7)</td>
<td>18%* (8)</td>
</tr>
<tr>
<td>Peer reviews of teaching or research/creative work</td>
<td>104</td>
<td>32% (8)</td>
<td>31% (7)</td>
<td>34% (8)</td>
<td>33% (8)</td>
<td>26%* (5)</td>
</tr>
<tr>
<td>Formal mentoring</td>
<td>108</td>
<td>25% (9)</td>
<td>19% (12)</td>
<td>33% (8)</td>
<td>30% (6)</td>
<td>13% (12)</td>
</tr>
<tr>
<td>Stop-the-clock for parental or other family reasons</td>
<td>62</td>
<td>24%* (10)</td>
<td>34% (6)</td>
<td>14%* (14)</td>
<td>27%* (10)</td>
<td>18%* (8)</td>
</tr>
<tr>
<td>An upper limit on teaching obligations</td>
<td>113</td>
<td>21%* (11)</td>
<td>14% (15)</td>
<td>31% (10)</td>
<td>22%* (13)</td>
<td>18%* (8)</td>
</tr>
<tr>
<td>Paid or unpaid personal leave during the pre-tenure period</td>
<td>64</td>
<td>21%* (11)</td>
<td>13% (14)</td>
<td>27% (11)</td>
<td>26% (12)</td>
<td>12% (11)</td>
</tr>
<tr>
<td>Written summary of periodic performance reviews for junior faculty</td>
<td>108</td>
<td>20%* (13)</td>
<td>20% (10)</td>
<td>20% (12)</td>
<td>27%* (10)</td>
<td>4%* (15)</td>
</tr>
<tr>
<td>Professional assistance for improving teaching</td>
<td>100</td>
<td>18% (14)</td>
<td>20%* (10)</td>
<td>15% (13)</td>
<td>19% (15)</td>
<td>14% (11)</td>
</tr>
<tr>
<td>Periodic, formal performance reviews for junior faculty</td>
<td>111</td>
<td>15% (15)</td>
<td>16% (13)</td>
<td>14%* (16)</td>
<td>20%* (13)</td>
<td>4%* (15)</td>
</tr>
<tr>
<td>Travel funds to present papers or conduct research</td>
<td>117</td>
<td>7% (16)</td>
<td>7% (16)</td>
<td>8% (10)</td>
<td>8% (10)</td>
<td>6% (14)</td>
</tr>
</tbody>
</table>

Note: The values in parentheses indicate the vertical rank of that response. A * indicates a tie.
Tenure Clarity

Start early

- Transparency of expectations begins in the interview process and ought to be reinforced throughout the tenure track.

- Emphasize that your institution hires pre-tenure faculty because you believe they will succeed in getting to tenure.

- Suggest to new faculty: “The minute you leave faculty orientation, start your dossier.”

- Draft a “statement of mutual expectations” with each faculty member by no later than the end of the first year.

Provide workshops for pre-tenure faculty

- Organize periodic workshops for tenure-track faculty hosted by the provost to provide an in-depth explanation of the institution’s tenure process and criteria. Invite deans and current and former chairs of the Tenure & Promotion Committees. Follow the meeting with break-out sessions led by experienced tenured faculty from different academic disciplines, who have served on the appointment and promotions advisory board or committee, and who are equipped to give their pre-tenure colleagues advice about how to navigate the process. One institution runs a program called “Survive and Thrive in (our institution’s) Tenure System,” which walks participants through the process and suggests ways to track and document their accomplishments. The morning concludes with an hour during which assistant professors ask questions and raise concerns with a panel of chairs and tenured faculty.

- Host smaller workshops on guidelines for drafting CVs and promotion and tenure dossiers.

- Host workshops on matters of relevance and anxiety to faculty, e.g., Achieving Tenure, Getting Grants, Starting a Lab, Giving Feedback to Students, Time Management, When and How to Ask for Help/Mentoring.

Engage leadership

- Suggest that chairs invite their pre-tenure faculty to lunch individually or together to informal brown-bag lunches to create open forums where they are encouraged to ask questions regarding the tenure process.

- Ask questions of your chairs and faculty to determine whether your departments (and/or institution) are primarily oral cultures or written ones. If the former, challenge them to become the latter.

- Have the chair of the Tenure and Promotions Committee meet with pre-tenure faculty at the beginning of the tenure review year.

- Require a “pattern of administration” for new deans and chairs: a detailed plan for approaching their new roles. A "POA" contains teaching, research, and service expectations for all faculty in the department or school. It also details a process for buying out teaching, for equitable assignment of
Appendix D—FUMFRR Report Excerpt

From earlier report of Female and Underrepresented Faculty Recruiting and Retention Task Force (FUMFRR) 9.28.2011

**Recruitment of Minority Faculty (ongoing)**
The Task Force repeatedly discussed avenues for early recruitment of promising minority candidates. The interview process was identified as a crucial point, and ways of creating a more positive interview experience were discussed. Increasing the awareness and sensitivity of department chairs and search committee members to the importance of this experience in increasing faculty diversity were among the efforts explored.

**Faculty Center and Social Events for the Faculty (ongoing)**
Dr. Ivliyeva and Ms. Krueger led considerable efforts that preceded the dedication of the Faculty Center in a public ceremony on March 8, 2011. The Faculty Center is intended to serve as a venue for informal interaction among the faculty, with the goal of improving campus climate. Planning of events utilizing this venue remains on the Task Force agenda for AY 2011-2012.

**ADVANCE Proposal (ongoing)**
Drs. Brow, Crow, Montgomery, and Oboh-Ikuenobe led efforts in preparation of a proposal to the NSF ADVANCE program, which is intended “to develop systemic approaches to increase the representation and advancement of women in academic science, technology, engineering and mathematics (STEM) careers, thereby contributing to the development of a more diverse science and engineering workforce.” Dr. Elizabeth Creamer will serve as a consultant to the group in preparation of the proposal. In preparation for her visit, meetings were organized with several focus groups, with the goal of collecting information helpful in identifying issues of importance to recruitment and retention of female faculty. During her visit (on April 27-29, 2011), Dr. Creamer met with several different groups of faculty and administrators. Proposal preparation will continue during AY 2011-2012, with a submission deadline of Nov. 7, 2011.

**Tentative Tasks for AY 2011-2012**
- Continued child care endeavors
- Recruitment of minority faculty
- Retention of female faculty
- Welcome events for new faculty
- Utilization of the Faculty Center
- Completion and submission of ADVANCE proposal