WISELI
Women in Science & Engineering Leadership Institute
University of Wisconsin-Madison

Current Perspectives of Women in Science & Engineering at UW-Madison: WISELI Town Hall Meeting Report

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In April, 2002, the Women in Science & Engineering Leadership Institute (WISELI) at UW-Madison held two Town Hall Meetings. The purpose of these meetings was twofold: to introduce WISELI to the women in science and engineering on the UW-Madison campus, and to find out from the women in science and engineering on which of WISELI's many proposed initiatives the organization should focus.

The meetings were advertised through a number of mechanisms. Flyers were produced and distributed via email (to female faculty in the sciences and engineering), and posted in key buildings. A radio interview was held, advertising the meetings. An ad was placed on the UW-Madison's electronic schedule of events, in addition to ads placed on the individual electronic bulletin boards of the major colleges housing female scientists and engineers (e.g., the Medical School, the School of Engineering, etc.) The Directors and Leadership Team of WISELI made personal invitations to women scientists and engineers on campus. Finally, the Provost sent out the flyer to all deans, department chairs, center directors, and other important administrative personnel on campus, for distribution among their units. Approximately 73 persons attended the two meetings.

This report will summarize the main findings from the three main data-collection portions of the meetings. All of the materials used in the meetings, including consent forms, sign-in sheets, initiative descriptions, and questions asked are contained in Appendix 1.

In the first portion of the meeting, we used elements of the "Appreciative Inquiry" technique (Hammonds 1996) to essentially find out what is *good* for women in science and engineering at the UW-Madison campus. The attendees broke into diads, and interviewed each other, asking the following questions:

- "Looking at your entire experience as a professional at UW, recall a time when you felt the best about your work. What contributed to this feeling?"
- "Tell me what you value most about your professional life."
- "If you could have any 3 wishes to advance the opportunities for women in science and engineering at UW, what would they be?"

After the interviews were concluded, the attendees reported what they learned in their interviews in the large group.

The second portion of data collection was performed using an automatic response system. Attendees (who signed a consent form) received an automatic response device, and answered a series of 21 multiple-choice questions on a variety of topics (see Appendix 1.) When attendees entered an answer on their device, the data were automatically collected via wireless technology, and a chart graphing the audience's responses was displayed, providing immediate feedback to the audience. In addition to demographic questions, this portion of the meeting asked about climate for women in one's work environment, and asked the respondents to rate nine proposed WISELI initiatives.

The third portion of data collection occurred at the end of the meeting, when attendees were asked to answer a few more question on paper. First, they were asked to rank the

same initiatives they prioritized using the automatic response device according to the importance of the initiative "to you personally." Second, they were asked to answer the following open-ended questions:
- "Why did you come to today's Town Hall meeting?"
- "Is there anything else you would like us to be thinking about as we develop this project?"
- "What are your reactions to participating in this meeting?"

Findings: Appreciate Inquiry[1]

Although three questions were asked in the interviews, we only elicited responses to two questions in the meetings. The first two questions ("Looking at your entire experience as a professional at UW, recall a time when you felt the best about your work. What contributed to this feeling?" and "Tell me what you value most about your professional life.") are similar, and the attendees were asked to respond to them as one entity. Overall, eight general themes emerged about what is "right" about scientific careers at UW-Madison:

- **Formal success or recognition as a result of accomplishments** ("successful research results and subsequent publication", "being promoted to full professor", "invited to give a university seminar.")
- **Nature of research/Excitement of scientific discovery** ("joy of discovery of science", "overcom[ing] a technical problem that had seemed insurmountable.")
- **Having an impact on others through teaching/mentoring** ("pride in students' achievements", "working 1/1 with students—have an impact when it matters.")
- **Having an impact on others through scientific work** ("Seeing people benefit from the work you and others are doing", "seeing work used by other institutions.")
- **Collaborations with colleagues** ("…colleagues value my input and ideas", "taking on a new project and feeling supported by [the] team.")
- **Autonomy/academic freedom** ("empowering to have one's own research agenda", "freedom to work on what [one] considers important", "flexibility of time")
- **Support of senior colleagues** ("when mentor understands and appreciates [one's] work", "new role models of women with families are encouraging.")
- **Leadership opportunities on campus** ("support of leadership at school/college level", "working for institutional change for the benefit of the institution.")

Responses to the third Appreciative Inquiry question ("If you could have any 3 wishes to advance the opportunities for women in science and engineering at UW, what would they be?") were collected in the larger group. The women scientists and engineers at UW-Madison had eight main "wishes":

- **More flexibility**

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[1] Appendix 2 contains full findings for the Appreciative Inquiry portion of the meetings.

- o **In career progression** ("better maternity leave", "concerned about balancing family and work…tenure clock extension.")
- o **In amount worked** ("explore and advertise what part-time options are available", "wish there was more time in the day")
- **More mentoring** ("closer collegial and mentoring relationships")
- **More networking opportunities**
  - o **In general** ("networking opportunities early in career")
  - o **Among women** ("promote female collaboration support structures")
- **Strong UW leadership** ("deans who believe in diversity hiring", "more appreciation from those in power")
- **More women and minorities in faculty and leadership positions** ("more women at all levels, undergrads on up", "more women in 'powerful' positions", "more women active in grant panels and scientific societies")
- **Improve the climate**
  - o **Gender climate** ("women will be accepted as equals in a collegial atmosphere", "every man should have a daughter in college in science", "that people 'get it' about gender")
  - o **Work/Family** ("we would be allowed to have a family life")
  - o **More rewards** ("more positive feedback", "better rewards in academia for all your hard work", "service activities were truly valued")
  - o **Less hostility** ("I wish that the people who create roadblocks would just go away.")
  - o **Less inequity** ("recognition would flow to merit", "equal access to opportunities")
  - o **Climate for academic staff** ("mechanisms for more inclusion of staff in academic life of departments")
- **More funding opportunities** ("more financial support", "constant supply of money")
- **Better Work/Family Policies**
  - o **Childcare** ("on-site daycare")
  - o **Maternity leave** ("Paid maternity leave, institutionally supported")
  - o **Health insurance for aging parents**

Findings: Automatic Response System ("gizmos")[2]

Approximately 70 women in the two Town Hall meetings used the automatic response devices (what we called "gizmos" in the meeting) to answer a series of 21 questions presented to them. The first questions were demographic in nature, assessing the race/ethnicity, title, and school/college of the participants. Very few of the women attending (6.1%) were members of racial/ethnic minority groups. Most of the attendees (46.3%) were faculty members; many academic staff (16.4%) and post-docs (16.4%) attended. In addition, a number of administrative academic staff members (10.5%) attended. CALS, L&S, and the Medical School were the best-represented schools,

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[2] Appendix 3 reports the responses to all questions.

followed closely by the School of Engineering. About forty percent of the women work in departments or units that employ 25% or fewer women. Figure 1 displays the attendance at the two meetings, by school/college and position.

The next eight questions in the automatic response portion of the meeting inquired about the participants' opinions about gender issues. In the following discussion, administrative academic staff and "other" attendees have not been removed. Although these women are not currently engaging in scientific research or teaching, many of them came to the meetings because they have degrees in scientific fields and so think of themselves as "women in science," even if they no longer engage in that science in their jobs.

Figure 2 reports the responses to the question "Do you do more work activities outside of your primary responsibilities of research and/or teaching (e.g., committee work, advising students) than do your male colleagues in a similar appointment?" A full 70 percent of the women reported that they did more work than their male colleagues, and a third of them reported doing "much more" work. Only one person reported doing less work. Figure 3 reports the answers to questions about impediments to "performing to your full potential." We asked about the physical environment (e.g., old building, too little space), insufficient administrative support (e.g., secretarial, teaching assistant, grants management), gender climate, and balancing personal and work life. Only those answering that the area is "a large impediment" are reported in Figure 3. Approximately one-fifth of the women thought that the physical environment, insufficient administrative support, and gender climate were large impediments to their work performance. However, the overwhelming response to the "work/home balance" as a large impediment (58 percent) points to this area as an area for concern on this campus. Finally, we asked women "how do you foresee the climate for women in your work environment changing in the next few years?" Their answers are reported in Figure 4. Most women (around 60 percent) thought the gender climate would stay the same, with almost a third of the women reporting optimism that the climate would get better in the next few years.

The last "gizmo" questions asked the attendees to prioritize nine WISELI initiatives according to their "overall importance" to women scientists and engineers on the UW-Madison campus. Before the automatic response portion of the meetings began, the nine initiatives were described in detail, and any questions about the initiatives were answered. The respondents were asked to rank the overall importance of the initiative as "high priority", "medium priority", or "low priority." (A "no opinion/not enough information" option was also provided.) The percentage of women reporting an initiative as "high priority" overall for UW-Madison is displayed in Figure 5 (blue bars.) Clearly, the women ranked the Life Cycle Grant program, and the Faculty and Staff Workshops as the most important initiatives overall; over 60 percent of the women selected "high priority" for these two. Four other initiatives, the Resource Study, Climate Study, Promotion of Non-Tenure-Line Women, and Leadership Development for Non-Tenure-Line Women had almost half of the respondents reporting them as "high priority." Dean/Chair Workshops, "Celebrating Women in Science and Engineering Symposia", and the Cluster Hire initiatives were the lowest-priority initiatives, according to the attendees.

Findings: Initiative Rankings[3]

After the automatic response portion of data collection ended, we asked the women in attendance to consider the nine potential WISELI initiatives again, this time ranking them according to "their importance to your and your career." In Figure 5, the percentage of women ranking an initiative as one of their top three personal priorities is displayed[4]. Again, the Life Cycle Grant program and the Workshops for Faculty and Staff were the most highly-rated initiatives we proposed. Asking the women to rank the initiatives in this way, however, revealed that doing a Resource Study and a Climate Study are about as important to women as the programs that would benefit them more directly. Again, Dean/Chair Workshops and the Cluster Hire initiative were the least popular initiatives. Interestingly, while many women reported the two initiatives directed at Non-Tenure-Line women as "high priority" for the campus as a whole, they were less-interested in these initiatives personally.

Findings: Open-Ended Questions[5]

We asked three open-ended questions at the end of the meeting. Response was high— around 60 people responded between the two meetings. We asked the first question, "why did you come to today's Town Hall meeting?" in order to uncover specific concerns that women might have that would make them take the time out of their busy schedules to attend our Town Hall meeting. This question elicited answers fitting five general themes:

- **Chance to learn about WISELI** ("to find out what WISELI is doing", "to learn about this new program and its potential")
- **Interest in issues facing women** ("I am a scientist very interested in women's issues", "because I support advancement of women in science")
- **Desire to contribute to improvement of status of women at UW-Madison** ("interest in being more involved", "want to improve climate on campus")
- **Interest in meeting other women in science and hearing their experiences** ("I'm new here, and I wanted to see if there really were other women in science and engineering!")
- **Professional development** ("I want to be a better leader", "my advisor told me it would be a good idea")

The second question, "Is there anything else you would like us to be thinking about as we develop this project?" was included in order to generate ideas for WISELI. Generally, responses fell into two categories—processes WISELI should use, and issues WISELI should address.

- **Processes WISELI should use**
    - **Visibility/Outreach** ("find a way to get more faculty involved")

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[3] Appendix 4 reports the ranking results from the two meetings.
[4] Many women did not rank the initiatives 1 through 9; rather, they used some rankings more than once.
[5] Appendix 4 reports the open-ended question answers from both Town Hall meetings.

- **Inclusion of audiences** ("include men in all activities", "what [is] the contribution of graduate students")
- **Methods of communication** ("frequent and repeated meetings", "use electronic web...web-based symposia")
- **Research methods** ("avoid redundancy with recent surveys", "interview women scientists...outside the circle who come to meetings")
- **Specific issues WISELI should address**
  - **Family-related issues** (e.g., child care, part-time work)
  - **Academic staff issues** (e.g., job security, pay, lack of respect)
  - **Diversity among women** (e.g., race/ethnicity, age)
  - **Networking** (e.g., mentoring, networking for women early in their careers)
  - **Pipeline issues** (e.g., outreach for K-12, attracting females to SMET fields)

Finally, we asked the Town Hall meeting attendees "what are your reactions to participating in this meeting?" This was primarily an evaluative question, and responses fell into five main categories.

- **Explicitly positive statements about the meeting** ("glad I came", "very positive—good energy")
- **Comments on the structure of the meeting** ("the gizmos were fun", "the wish list part was interesting", "it was a bit slow", "some questions hard to answer if not faculty")
- **Chance to network and hear other women's experiences** ("inspiring to be in a room with so many women scientists", "comforted somewhat by seeing women with similar concerns")
- **Comments/concerns about WISELI as a program** ("excited about the potential", "group is not representative of women on campus", "concerned that project direction is not clear")

Summary and Conclusions

We had two main goals for the WISELI Town Hall meetings. First, we hoped to introduce WISELI to the community of women scientists and engineers on the UW-Madison campus; second, we hoped to gain feedback from this community on how to prioritize the many initiatives WISELI has proposed for the five-year grant period. We think that both goals were satisfactorily met with these two meetings.

The first goal was to introduce WISELI to the UW-Madison community. Our target audience was women faculty and academic staff in the sciences and engineering at UW-Madison. There are roughly 532 women in our target audience, and approximately 43 of the 70 meeting attendees were in this population; thus, we directly reached about 8 percent of our target audience. This might not seem like a large percentage, but we were asking the women to take a significant amount of time (90 minutes) from their already busy lives to attend this meeting. Just by advertising the meetings we reached many

more women, even if they did not have a chance to attend; in fact, many requests for a third meeting were received (although we decided not to add a meeting.)

One measure of the impact of holding these meetings on the visibility of WISELI is to measure the number of people who signed up for the listserv after the meetings. After the two meetings, we count an additional 36 people who have signed up for our WISELI listserv, a 70 percent increase over the previous count.

The second goal was to find out what concerns were most important to the women in science and engineering on the UW-Madison campus. This answer seems clear—work/family issues are of primary importance. In both meetings, the Life Cycle Grant program received a high priority rating (both "overall" and personally to individual women). In addition, work/family issues were identified as creating a large impediment to achieving the professional potential of the women who attended the meetings. As we identified above, about 8 percent of the women faculty and academic staff in sciences and engineering on this campus attended our Town Hall meetings. For those who could not come, competing family demands are very likely to be a large reason (and we received feedback to this effect.) We believe that WISELI needs to put priority on these issues and initiatives in their plans.

A second priority identified by the Town Hall meetings is the development of workshops for faculty and staff. We were not specific about the topics to be covered in such workshops, but the examples we gave (negotiating, leadership training, working with difficult people, managing a research program) were intriguing enough that the meeting attendees showed great interest.

Finally, two proposed research studies—the resource study and the climate study—received fairly high priority rankings at both Town Hall meetings. The climate study will be fielded in the fall, and we hope to begin work on the resource study next year.

The WISELI Town Hall meetings were both fun and informative. We had the opportunity to introduce ourselves to the community of women scientists and engineers we hope to serve, and to get their feedback about the kinds of initiatives they most need on this campus. As promised, we are using the priorities set at these meetings to shape WISELI's agenda for the next year.

**Figure 1.
WISELI Town Hall Meeting Attendees,
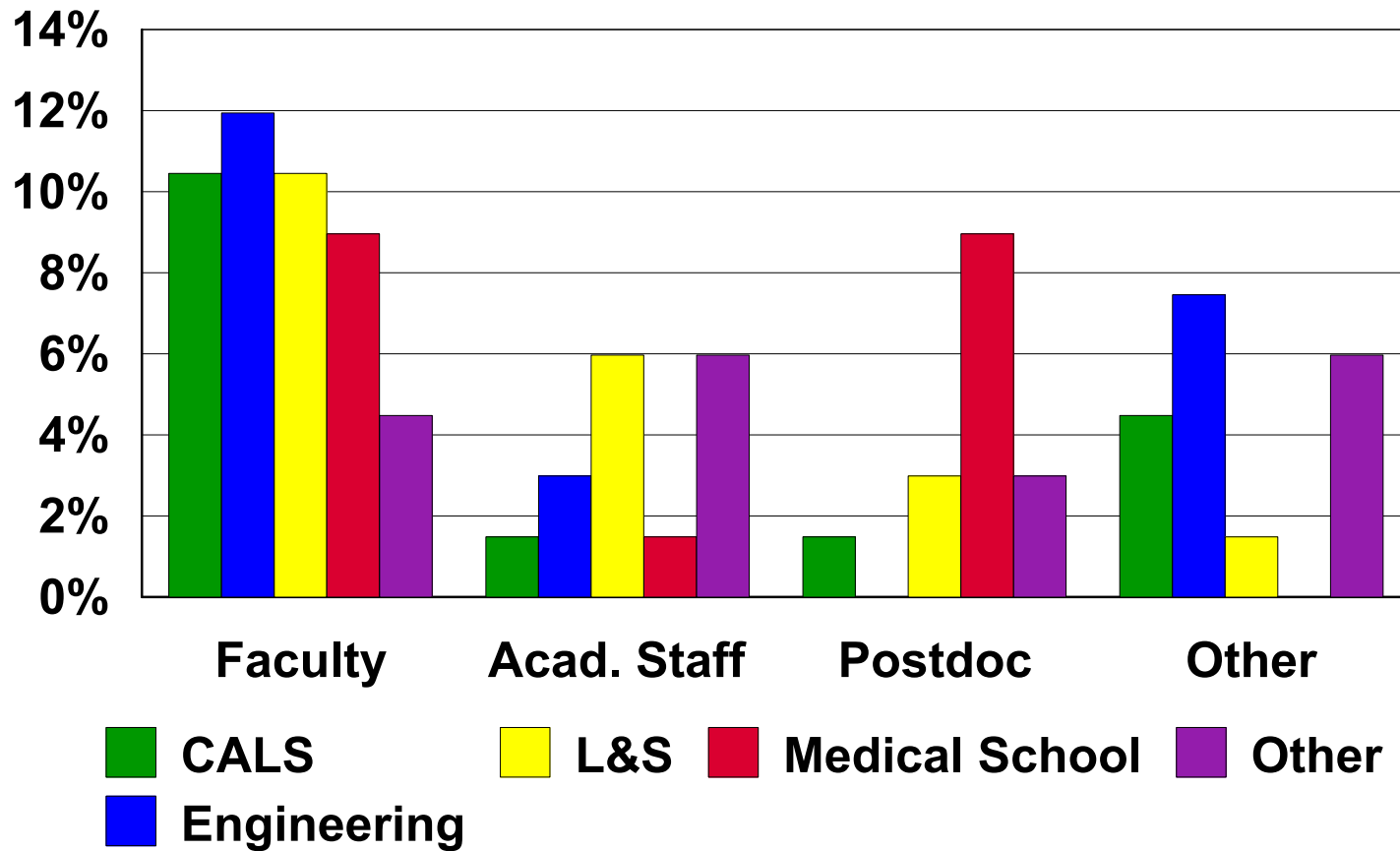by School and Position**

Figure 2.
How much work do women scientists feel they do compared to male colleagues?
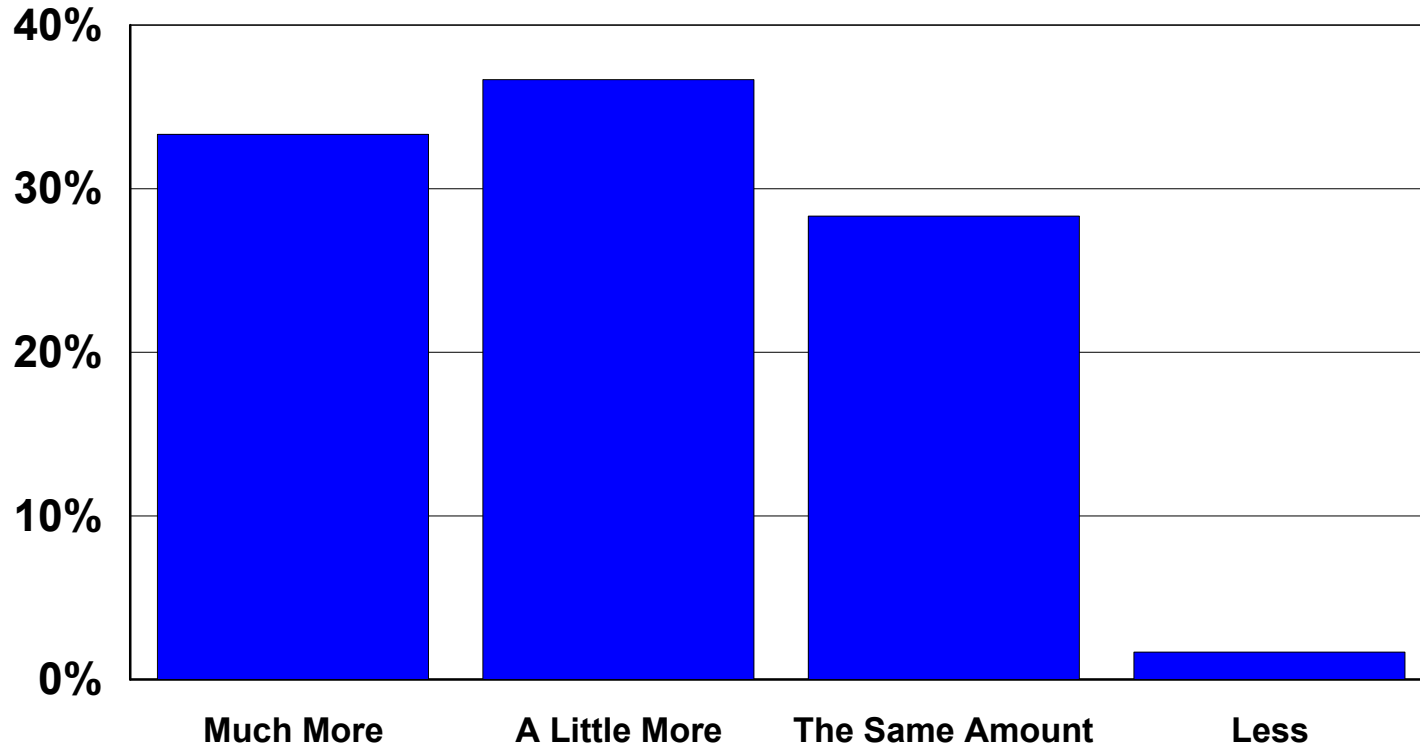
Figure 3.
Percent rating area as "a large impediment"
to performing to full potential
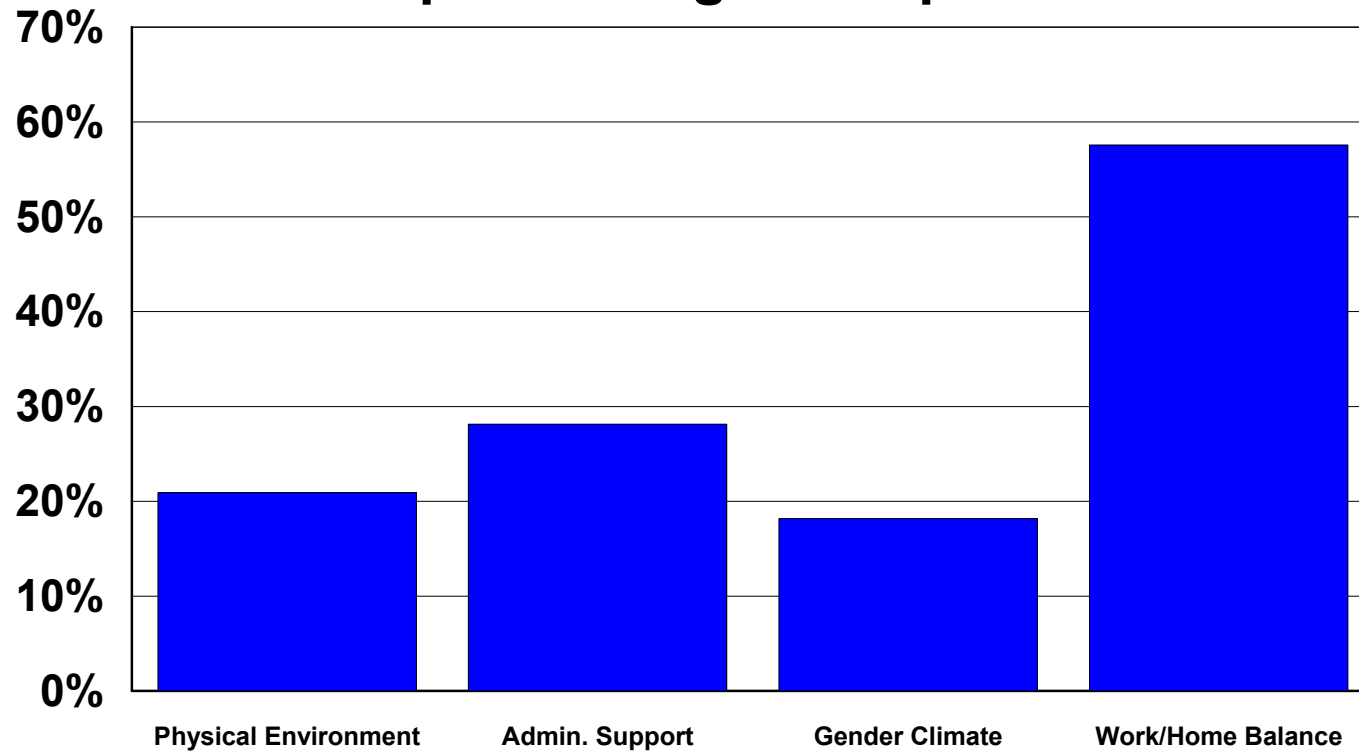
Figure 4.
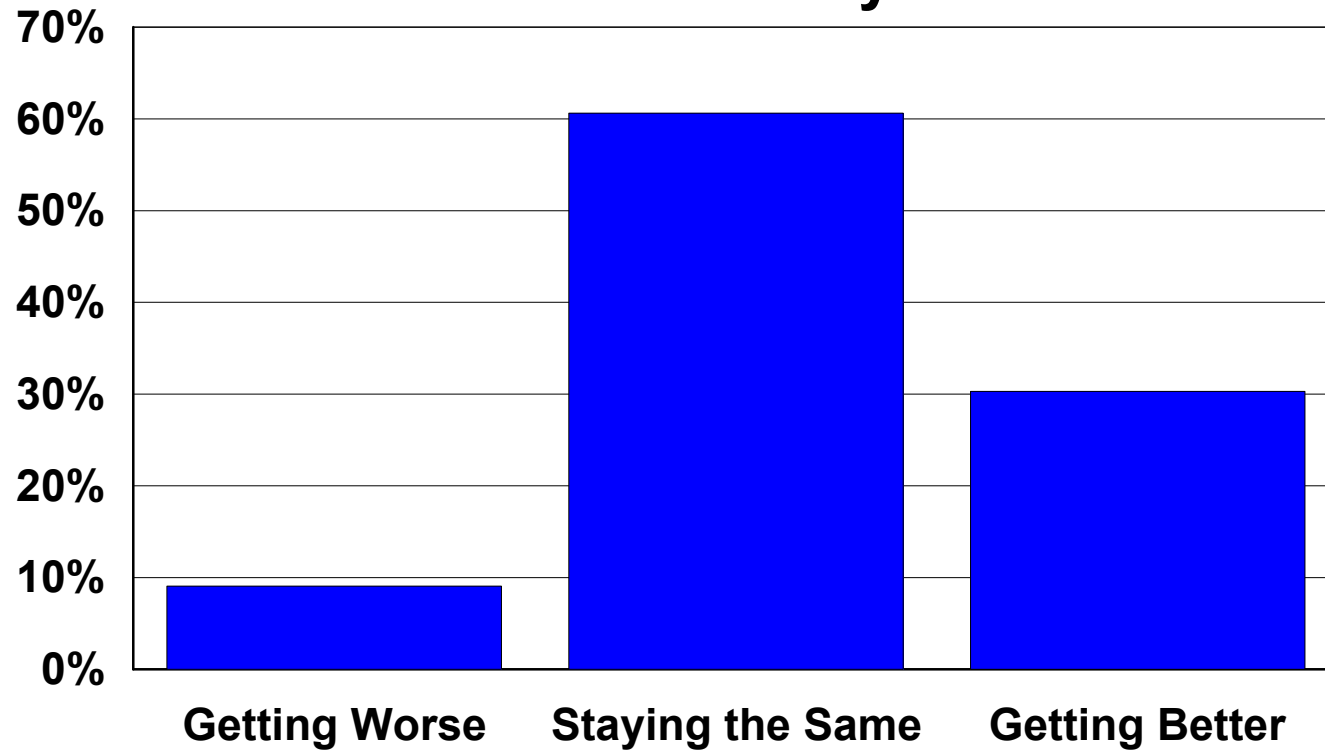**How will climate for women change in the next few years?**

Figure 5.
Highest Priority WISELI Initiatives:
"Overall Importance to UW-Madison" and
"Importance to Me Personally"

Overall ■   Personal ■