Annual Report of ADVANCE program for University of Wisconsin-Madison
2003

Principals, *University of Wisconsin-Madison*:

Prof. Molly Carnes, Department of Medicine
Prof. Jo Handelsman, Department of Plant Pathology
Dr. Jennifer Sheridan, WISELI

Executive Summary: Major Accomplishments in Year 2

"It's so different!" This comment, from a long-term member of the UW-Madison faculty, summarizes the transformation of our campus. Women increasingly feel empowered to speak up and take action. Gender issues are visible, taken seriously at all levels, and addressed with resources and commitment. Poor behaviors by members of the community are addressed by high level administrators, successes in hiring women are broadly celebrated, and faculty and administrators take pride in the advancement of women on our campus. There is clearly much more work to be done. But we have the attention of the campus, the alignment of institutional resources and infrastructure, and a strategic plan to move forward.

The past year in our ADVANCE program was dedicated to launching and evaluating our central initiatives. Some of our key accomplishments include:

- Developed, piloted, and launched campus-wide workshops on hiring practices that includes familiarizing search committee chairs with the research indicating bias in evaluation of women candidates.

- Developed and piloted an innovative workshop series for department chairs to improve climate, to be fully launched in 2004. The workshop provides chairs with national- and campus-level data about climate and gender biases as well as the opportunity to conduct an electronic survey to assess their own department's climate. The discovery-based approach involves chairs working in small groups to devise solutions to each others' climate problems.

- Placed WISELI Leadership Team members is key positions that have influence over gender-related policy and practice. These include: Bernice Durand, Associate Vice Chancellor for Diversity and Climate; Patti Brennan, University Committee; Caitilyn Allen, Biological Sciences Divisional Committee; Molly Carnes, Campus Planning Committee Liaison; Cecilia Ford, co-chair of the Committee on Women in the University.

- Conducted campus-wide surveys of climate for faculty and staff, initiated analysis, and reported preliminary results to several groups, including the Chancellor, Provost, and all of the deans.

- Forged partnerships with the Provost's Office and the Graduate School for WISELI initiatives. They have provided substantial financial resources as well as personnel dedicated to launching our initiatives campus-wide.

- Completed the first video documenting WISELI's impact on campus. Public screening of the video will occur in early 2004[1].

- Provided guidance and assistance in resolution of issues for five senior women, preventing departures, resignation from leadership positions, and possible lawsuits; assisted in two tenure cases that have been resolved successfully.

- Awarded eight new Celebrating Women in Science & Engineering grants. One award was used to bring Prof. Virginia Valian to campus for a series of meetings with department chairs, high-level administrators, and women faculty, in addition to a well-attended public lecture.

- Advice and expertise was sought out by Office of the Provost in the creation of an exit interview protocol and instrument for faculty leaving employment at the UW-Madison.

- Enhanced the WISELI seminar where research on women in science and engineering is presented and discussed by moving to a larger space, adding a third seminar each semester, and providing an opportunity for continued discussion as a follow-up to each lecture.

- In partnership with the Graduate School, provided funding for 4 men and women faculty during vulnerable junctures in their research through the Life Cycle Research Grant initiative.

- Continued an ethnographic study of men and women faculty in science and engineering that has resulted in one peer-reviewed publication to date, with more in the pipeline.

- Analyzed in-depth interview data from a stratified random sample of 41 women faculty and academic staff in the sciences and engineering.

- Completed and evaluated semi-structured conversations with 40 of the 81 women full professors in the biological and physical science divisions.

- Began discourse analysis of men and women's conversation in naturally-occurring academic meetings.

[1] Event took place March 1, 2004.

Overview

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

An Overview of WISELI

In response to the concerns that we as a nation are not training enough or sufficiently diverse people to meet the growing demands of our scientific workforce and that there are already critical shortages in some fields, the National Science Foundation launched the ADVANCE program. The goal of this program is to increase the participation and advancement of women in academic science and engineering, with particular emphasis on increasing the number of women in positions of leadership. Under this program, nine initial sites were awarded Institutional Transformation Awards ($3.75 million over five years). The UW-Madison project, which began January 1, 2002, has established the Women in Science & Engineering Leadership Institute (WISELI). WISELI is approaching the issue comprehensively and with an evidence-based framework designed to answer the questions: What are the barriers impeding the participation and advancement of women in science and engineering? How can we eliminate or overcome these barriers?

We have assembled a broadly interdisciplinary Leadership Team that includes faculty from departments of Medicine, Plant Pathology, Electrical Engineering, Industrial Engineering, Engineering Physics, Mechanical Engineering, Physics, Ob/Gyn, Sociology, English, and the Schools of Education and Nursing. The Leadership Team works closely with the co-Directors and Executive Director to provide direction for the design and implementation of initiatives and for evaluation of new and existing initiatives that are intended to enhance the participation of women in science and engineering. The evaluation scheme includes quantitative and qualitative approaches, drawing on campus expertise in statistics, sociology, anthropology, and linguistics.

Organizational Chart

WISELI Management and Infrastructure

Directors

Co-Director: Molly Carnes
Co-Director: Jo Handelsman
Research & Executive Director: Jennifer Sheridan

Staff

Researcher: Eve Fine
Research Specialist: Deveny Benting
Webmaster: Stephen Montagna

Leadership Team

Vicki Bier, Patti Brennan, Bernice Durand, Pat Farrell, Cecilia Ford, Douglass Henderson, Cathy Middlecamp, Paul Peercy, Gary Sandefur, Gloria Sarto, Amy Stambach, Lillian Tong, Amy Wendt

Internal Advisor: Linda Greene, Assoc. Vice Chancellor

Evaluation Team

Evaluation Director: Christine Maidl Pribbenow

Deveny Benting, Cecilia Ford, Ramona Gunter, Margaret Harrigan, Jennifer Sheridan, Amy Stambach, John Stevenson

Administrative Partners

Chancellor John Wiley	President Katharine Lyall	Provost Peter Spear	Dean Graduate School, Martin Cadwallader
Sr. Vice President Cora Marrett	Dean Elton Aberle, College of Ag. & Life Sciences	Dean Daryl Buss, Veterinary Medicine	Dean Phil Certain, Letters and Science
Dean Phil Farrell, Medical School	Dean Jeanette Roberts, Pharmacy	Assoc Dean Terry Millar, Grad School	Assoc Dean Tim Mulcahy, Grad School
Dean Robin Douthitt, School of Human Ecology	Dean Catherine May, School of Nursing	Prof Mariamne Whatley, Chair Women's Studies Pgm	Don Schutt, Human Resources

Campus Affiliates

Women in Science and Engineering and other supporters, through WISELI Listserv

External Advisory Team

Denice Denton, Joan King, Sally Kohlstedt, Charlotte Kuh, Sue Rosser

Initiative Updates

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

Description of selected initiatives:

I. RESOURCES

Examine the patterns of assigning institutional resources for uneven distribution by gender. WISELI is collecting information on start-up packages, assigned space, access to administrative support, assignment of teaching assistants, type of class (e.g. undergraduate vs. graduate), number of graduate students and postdocs, and location of office and laboratory. Data not available in existing records will be gathered in interviews with departmental administrators, faculty, and on-site inspection by the Executive Administrator, PIs, and Leadership Team. Taking into account the complex factors involved in assignment of institutional resources, we will look for patterns that might disadvantage or advantage women faculty. If found, we will interview department chairs regarding the reasons for such assignment. We will compile a report of the results to present to the deans and senior administrators as a means to promote equitable distribution of institutional resources.

II. WORKPLACE INTERACTIONS

Climate Improvement Workshops for Chairs and Directors. We developed a three-part workshop program to improve climate in collaboration with the Provost's office. The proposal accommodates two beliefs about climate: 1) climate is a global problem, but the manifestations and language are local, and therefore solutions must be tailored to the local environment; and 2) many chairs and directors do not perceive a climate problem in their units. To accommodate these realities, we form cohorts of chairs and directors to study and analyze the manifestations of climate in their own units and work as a group with the help of facilitators to address the problems they discover. The goals are for chairs to emerge with a better understanding of climate, immediate improvements in climate in their departments, and a "toolbox" of methods to address future climate issues.

Training of Search Committee Chairs. The goal of this initiative is to increase the diversity of candidate pools for faculty and administration positions. In collaboration with the Provost's office, Office of Human Resources, and the Equity and Diversity Resource Center, we developed a three-session program for chairs of search committees. At the first meeting, which will be before the first meeting of the search committee, we share strategies for running efficient meetings, gaining participation of all committee members, and building a diverse pool. Before the application deadline, we meet again to share results and find out what strategies were successful for each search. At that meeting we also discuss strategies for ensuring equitable and thorough review of candidate files. The final meeting takes place before the list of candidates to interview is

finalized. We discuss how to balance efficiency with interviewing broadly, how much recruiting to do during the interview, and design of interview questions. These sessions are intended to make search chairs aware of successful strategies to broaden their pools, the biases and assumptions that all people bring to the review process, and techniques to reduce the impact of these biases and assumptions.

Workshops on Building Effective Research Teams. A workshop series on building effective research teams will be developed for principal investigators. The focus will be on issues that affect women disproportionately, but will be advertised on the basis of improving the overall functioning of research laboratories. Topics will include learning how to motivate members of a team by using positive approaches, conflict resolution, providing a supportive, respectful, and safe environment, and building cohesive, collegial teams. The workshops will be developed in collaboration with The Graduate School, and design team members will include faculty who run research laboratories, deans, experts in conflict resolution and respect in the workplace, and graduate student(s). The workshops will be presented in two parts. The first session will include a discussion of methods to assess climate and productivity of a lab group. PIs will then return to their labs to gather information by survey or other methods. In the second session, participants will discuss their findings and strategies to improve their groups' productivity. The workshops will be offered on campus every semester. We will incorporate this workshop into existing training offered by the Graduate School to encourage attendance by all faculty.

III. LIFE-CAREER INTERFACE

Life Cycle Grants. In collaboration with the Graduate School, WISELI launched the Life Cycle Research Grant Program. These funds are available at critical junctures in the research career, when research productivity is directly affected by personal life events (e.g. complications from childbirth, parent care responsibilities, illness of a spouse, etc.) These grants are meant to be flexible, and faculty may apply for varying amounts and academic purposes.

Creating Space. Designating building space to accommodate the biology of motherhood and parenting acknowledges the value an institution places on having women in the workforce. Through the efforts of the WISELI Leadership Team: 1) a Lactation Room will be created in the new Mechanical Engineering Building; and 2) a group of faculty and students in Industrial Engineering are using student and workforce projections along with state regulations and expert opinion to estimate the space required within each new building for infant childcare.

IV. DEVELOPMENT, LEADERSHIP, VISIBILITY

Celebrating Women and Science and Engineering Grants. This grant program is the result of a collaboration between WISELI and the following Schools/Colleges: CALS, L&S, Pharmacy, Medical, Veterinary Medicine, and Engineering. This program provides funds to departments, centers, or student groups (in collaboration with an academic unit) wishing to enhance their own seminar schedules or especially to create new workshops, symposia, lecture series, or similar events in line with the goals of WISELI: to promote

participation and advancement of women in science and engineering. The maximum award is $3,000, and the maximum time frame for the award is one academic year.

Study the impact and feasibility of moving outstanding non-tenure line researchers into faculty positions. Examination of data on staff positions indicates that we could increase the number of women faculty in many departments simply by converting academic staff positions to faculty positions for women who wish to expand their roles. A number of women on our campus who hold academic staff titles pursue independent research and have teaching reputations and credentials equivalent to those in faculty positions. Many of these women entered science at a time when nepotism rules, prejudices, or their own life choices prevented them from entering tenure-line faculty positions. In the present era, a number of these women might have become faculty members through dual career recruitments. Our goal is to create a "roadmap" for academic staff wishing to convert tracks to faculty appointments. In order to do this, we have worked on a case-by-case basis. One early discovery was that this issue is confounded by the fact that the women identified would be more likely to seek promotion on education and teaching than research and this is rarely done at UW-Madison. To date, we have 1) advised one woman on steps to take to make a case for switch on the basis of education scholarship in the future; 2) successfully collaborated on conversion of one assistant professor from academic staff to tenure track; and 3) moved one case systematically through departmental and campus protocols and this case will be decided soon.

Senior Women Faculty Initiative. UW-Madison has 79 women full professors in the biological and physical sciences and engineering. WISELI's intention was to meet with all these women over the grant period (in small groups of three to four, or individually as dictated by schedules and preference). Thus far we have met with 40. These meetings have been valuable in helping WISELI choose directions for in-depth intervention (e.g. chairs climate workshops), disseminate information about WISELI to women on campus, and learn what research our senior women are doing.

Nominations and Awards for Women Faculty. In order to increase the visibility of our talented women scientists and engineers, WISELI will produce an informational brochure to inform women: when in their careers they should be receiving honors, awards, and membership in exclusive societies; which campus and selected national awards and honors are appropriate at different times in the career; how to advocate for oneself in order to ensure that one is considered for such honors; the benefits of such awards; and other advice. This brochure will also be publicly available through the WISELI website.

Endowed Professorships for Women in Science. In response to the NSF ADVANCE program, the Chancellor has included 10 professorships (20 million dollars) for women in science and engineering on the select list of targets for fundraising. This list sets priorities for the $1 billion capital campaign recently launched by the campus and therefore appearance on the list demonstrates a clear commitment to the Institutional Transformation initiative. Each professorship will be competitively awarded through a campus peer review process. Selection criteria will include quality of contributions to science and teaching, past impact on women in science, and future plans for a leadership role in science. Each recipient will be provided financial support for 10 years but will retain the title of the endowed chair for the duration of her career.

Leadership Development of Non-Tenure Line Women in Science and Engineering. The scientific community contains a number of outstanding staff scientists who could be contributing more to the leadership in their respective fields. WISELI is promoting the leadership development of these staff women in science and engineering by including academic staff on the Leadership Team, surveying selected academic staff titles in our worklife survey, making leadership development opportunities available to academic staff by covering tuition for campus workshops and selected national meetings, and providing staff assistance to one academic staff member to encourage the conduct of research related to women in science and engineering.

V. OVERARCHING

Establish the Women in Science & Engineering Leadership Institute (WISELI). The Women in Science & Engineering Leadership Institute (WISELI) has the overall mission of increasing the participation and advancement of women in academic science and engineering at UW-Madison. The long-term goal is to have the gender composition of the faculty, chairs, and deans in the sciences and engineering reflect the gender composition of the student body in these fields. WISELI will use UW-Madison as a "living laboratory" to study the problem of the lack of diversity in the sciences and engineering by centralizing collected data, monitoring the success of initiatives (both existing and new), implementing a longitudinal data system, and ensuring dissemination of best practices. WISELI will be funded by a grant from the National Science Foundation (NSF) of $3.75 million, which will support the planned initiatives for five years. Some of WISELI's more visible activities include:

- ***Town Hall meetings.*** Two Town Hall meetings were conducted in April 2002, where women scientists and engineers on the UW-Madison campus were invited to hear about WISELI and provide input into WISELI's priorities. A report of the meetings is available online. WISELI will run similar meetings as needed over the coming years.
- ***WISELI Seminar.*** Three times per semester, WISELI sponsors a research seminar focusing on women in science and engineering. Refreshments are served thirty minutes before the start of the seminar, so that the attendees may network.
- ***WISELI Website.*** WISELI's website went active in January 2002, and we have been adding content ever since. We post news items about women scientists and engineers from UW-Madison and keep a calendar of events occurring on campus that relate to women in science and engineering (including WISELI's own activities). Active initiatives that are "public" (e.g., grant programs) are posted there, as well as public reports of WISELI's activities and research. We include an annotated database of research related to gender equity. Finally, we post instructions on how to become an affiliate by joining the WISELI listserv. The website is: http://wiseli.engr.wisc.edu.
- ***WISELI Listserv.*** WISELI supporters can join our listserv and by so doing become a WISELI "affiliate." We use the listserv to: 1) notify affiliates of WISELI activities via announcements and an update of activities each semester; 2) forward announcements that have been carefully screened—items that most

affiliates will not have seen, and which have a broad appeal rather than an appeal to a specific discipline; and 3) occasionally put a call out to the affiliates for help when we need assistance with something.

- ***Compiling Resources and Institutional Examples.*** We are conducting a comprehensive examination of existing research and programs in existence at other comparable institutions. This is continually being updated and added to and can be accessed on the private WISELI working web site: http://wiseli.engr.wisc.edu/working. A user ID and password are necessary to access the site due to copyright restrictions.

Documentary Video. WISELI is working with a videographer to develop a documentary to capture the issues at UW and around the nation, inform viewers about WISELI and the NSF initiative, and document the institutional transformation. It will include interviews with UW faculty and administrators. The first public viewing occurred in March, 2004 and was enthusiastically received.

Evaluation/Research. WISELI will evaluate both new and existing initiatives at UW-Madison that are intended to promote a good working environment for women. Mechanisms of evaluation include a survey of men and women in science and engineering (see below), interviews, and examination of existing data. Existing initiatives to be studied include: the gender pay equity study, the Provost's climate initiative, sexual harassment information sessions, tenure clock extensions, dual career couple hiring, campus child care, split appointments, pipeline issues (including the WISE dorm), the Women Faculty Mentoring Program, and the Committee on Women in the University.

- ***UW-Madison Men and Women in Science and Engineering Survey.*** This is one of the cornerstones of WISELI's research. The survey design team includes staff from the UW Survey Center, the LEAD Center, WISELI, the Office of Budget, Planning & Analysis, a cultural anthropologist, and a professor of English Linguistics. We completed interviews with 41 randomly selected women faculty and academic staff; these interviews were used to identify themes that are addressed in the worklife survey. The population surveyed included all faculty and a 50% sample of academic staff in all divisions at UW-Madison. We have IRB approval to link the survey with public data so that we can monitor academically meaningful outcomes related to survey responses. We included some additional measures related to health. The survey will be repeated in three years.
- ***Interviews with UW-Madison women in science and engineering.*** We completed in-depth interviews with 41 women (faculty and staff) in biological and physical sciences. These interviews informed the worklife survey we developed, and formed a baseline of women's experiences on campus. In year five we will interview the women again.
- ***Ethnographic Study.*** The ethnographic study is using interview and survey data from the baseline study to determine key indicators of climate in each of the six colleges/schools with biological or physical science or engineering departments. It investigates these key indicators using qualitative methods and participant

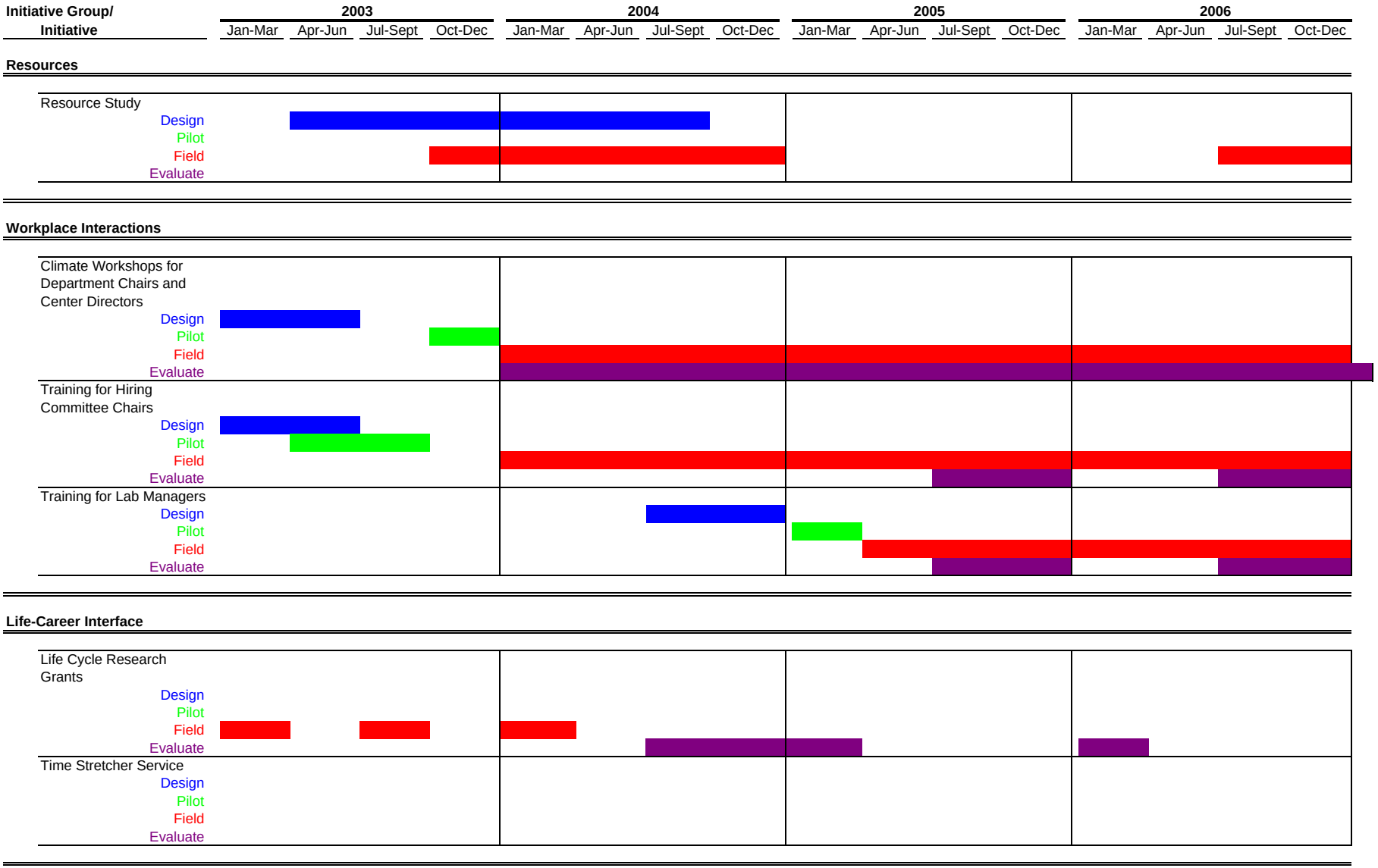
observation. The ethnographic study is providing the Leadership Team with descriptive data useful for building an aggregate measure for climate that will be entered into the statistical model, prioritizing future interventions, and designing interventions that are meaningful to women in science and engineering. The work will involve: 1) participant observation at several key junctures (e.g., faculty meetings, classes, thesis defenses, and other rites of passage); 2) participant observation in laboratories and working spaces, where everyday interactions often reflect and produce gendered inequalities; and 3) informal open-ended interviews with male and female faculty to augment baseline year one data and to gain greater understanding of competing views that emerge in sites observed.

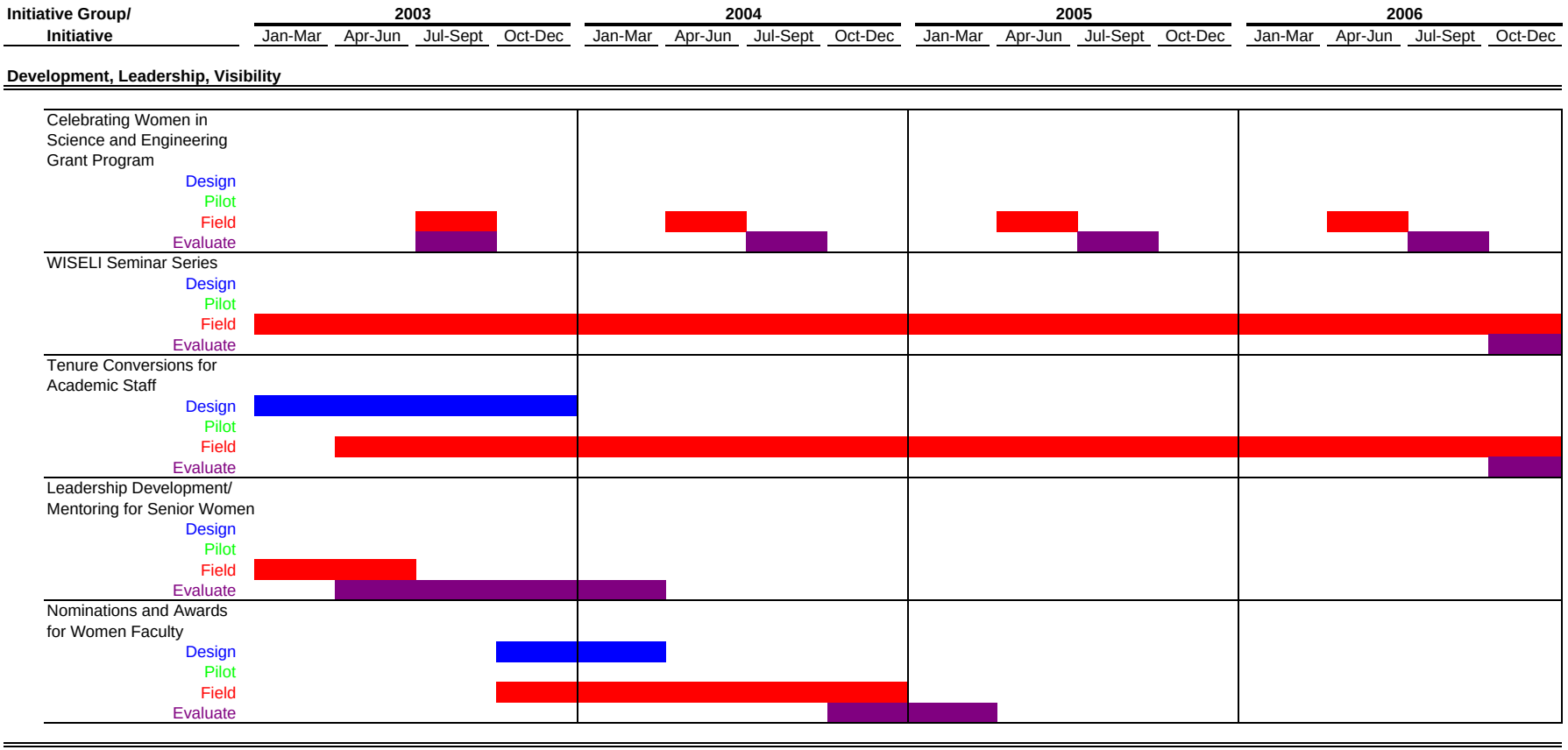
- ***Discourse Analysis of the "Ignoring-my-ideas" Phenomenon.*** Professor Cecilia Ford, whose work is in discourse analysis, was brought on as a member of the Leadership Team to examine whether and how the "ignoring-my-ideas" phenomenon described almost universally by women faculty can be documented in naturally occurring professional encounters. This work involves observation, videotaping, transcription, and analysis. The analytic method involves rigorous structural and sequential mapping of the interactions and contributions of participants, with attention to verbal and non-verbal aspects of the encounters. Fundamental to such analysis is the fate of topics: the introduction, uptake, and development of ideas. After mapping, the data are inspected for the role of gender and the potential sources for what has been experienced and reported as marginalization in women's interactions in academic environments. The work to date has led Professor Ford to re-frame the issue away from a deficit in women to a more positive question: How do women use language and non-verbal communication to have their ideas heard?
- ***Workshops for Faculty and Staff.*** We accomplish dissemination by participating in and leading local and national workshops for women and administrators, presentations at national conferences in the scientific disciplines of the PIs and the members of the Leadership Team (which includes more than 20 professional societies), and articles in popular and scholarly journals. Furthermore, whenever feasible and appropriate, when the PIs or members of the Leadership Team are invited to present scientific seminars on other campuses, they ask for the opportunity to present a second seminar about WISELI and its findings.

Timelines for New Initiatives

Timelines for Design, Pilot, Field, and Evaluation of New NSF ADVANCE Initiatives

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




Initiative Group/
Initiative
2003
2004
2005
2006
Jan-Mar
Apr-Jun
Jul-Sept
Oct-Dec
Development, Leadership, Visibility
Celebrating Women in Science and Engineering Grant Program
Design
Pilot
Field
Evaluate
WISELI Seminar Series
Design
Pilot
Field
Evaluate
Tenure Conversions for Academic Staff
Design
Pilot
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Evaluate
Leadership Development/ Mentoring for Senior Women
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Nominations and Awards for Women Faculty
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Pilot
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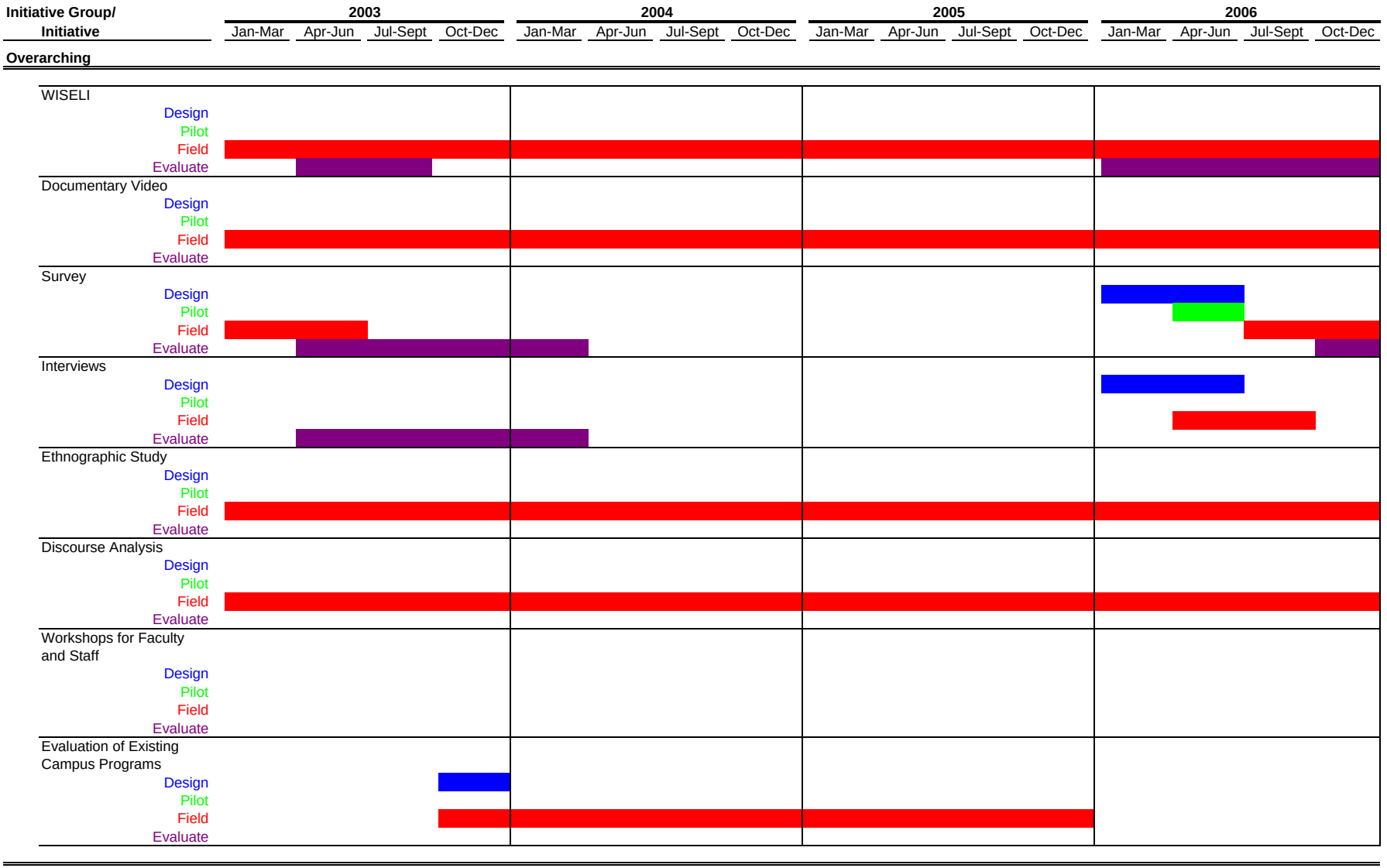
Initiative Group/
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2003
2004
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Jan-Mar
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Overarching
WISELI
Design
Pilot
Field
Evaluate
Documentary Video
Survey
Interviews
Ethnographic Study
Discourse Analysis
Workshops for Faculty and Staff
Evaluation of Existing Campus Programs

Papers and Presentations

WISELI Publications and Presentations

Papers:

Bakken, Lori L.; Jennifer Sheridan; and Molly Carnes. 2003. "Gender Differences Among Physician-Scientists in Self-Assessed Abilities to Perform Clinical Research." *Academic Medicine*. 78(12):1281-6.

Sheridan, Jennifer; Jo Handelsman; and Molly Carnes. 2002. "Current Perspectives of Women in Science & Engineering at UW-Madison: WISELI Town Hall Meeting Report." Available online at: http://wiseli.engr.wisc.edu/reports/TownHallReports/WISELI_Town_Hall_Report.pdf

Stambach, Amy and Ramona Gunter. 2003. "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." In press, *Gender Issues*.

Pribbenow, Christine Maidl; Susan Daffinrud; and Deveny Benting. 2003. "The Culture and Climate for Women Faculty in the Sciences and Engineering: Their Stories, Successes, and Suggestions." In progress.

Ford, Cecilia. 2003. "Gender and Language in/as/on Academic Science: Combining Research with a Commitment to Institutional Change." In progress.

Sheridan, Jennifer; Jo Handelsman; Molly Carnes. "Assessing "Readiness to Embrace Diversity": An Application of the Trans-Theoretical Model of Behavioral Change." In progress.

Papers Presented:

Carnes, Molly and Jo Handelsman. October, 2002. "The NSF ADVANCE Program at the University of Wisconsin-Madison: An Interdisciplinary Effort to Increase the Recruitment, Retention, and Advancement of Women in Academic Departmetns in the Biological and Physical Sciences." Presented at the *Retaining Women in Early Academic Science, Mathematics, Engineering, and Technology Careers* conference. Ames, Iowa.

Handelsman, Jo and Molly Carnes. December, 2002. "University of Wisconsin-Madison Women in Science and Engineering Leadership Institute." Presented at the Plant Pathology research seminar series. Madison, Wisconsin.

Murphy, Regina. November, 2002. "The Women in Science & Engineering Leadership Institute at UW-Madison." Presented at the American Institute of Chemical Engineers (AIChE) Annual Meeting. Indianapolis, Indiana.

Ford, Cecilia. July, 2003. "Gender and Language in/as/on Academic Science: Combining Research with a Commitment to Institutional Change." Presented at the

Perception and Realization in Language and Gender Research conference, Michigan State University, East Lansing, Michigan.

Stambach, Amy and Ramona Gunter. May, 2003. "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." Presented at the Gender, Science, and Technology International Conference, Norway.

Stambach, Amy and Ramona Gunter. May, 2003. "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." Presented at the Women in Physical Sciences peer mentoring group meeting, Madison, WI.

Sheridan, Jennifer; Molly Carnes; and Jo Handelsman. June, 2003. "The University of Wisconsin-Madison ADVANCE Program: Progress to Date." Presented at the WEPAN meetings. Chicago, IL.

Wendt, Amy. September 2003. "NSF ADVANCE at UW-Madison: WISELI Activities." Presented at the 25th anniversary of the Women in Computer Science and Engineering organization. Berkeley, CA.

Ford, Cecilia. September 16, 2003. "Gender and Talk: Looking back and looking forward." Presented at the Women's Health Forum of the UW-Madison Center for Women's Health and Women's Health Research. Madison, WI.

Sheridan, Jennifer. September 19, 2003. "WISELI Report to the Women Faculty Mentoring Program: Results from the 2003 Study of Faculty Worklife at the University of Wisconsin-Madison." Presented at the Women Faculty Mentoring Program rountable. Madison, WI.

Evaluation Reports:

Benting, Deveny and Christine Maidl Pribbenow. July 24, 2003. "Meetings with Senior Women Faculty: Summary of Notes."

Pribbenow, Christine Maidl and Deveny Benting. August 14, 2003. "Interviews with WISELI Leadership Team Members (2002-2003): Summary Report."

Benting, Deveny and Christine Maidl Pribbenow. November 14, 2003. "Survey of the Virginia Valian Luncheon: Final Report."

Pribbenow, Christine Maidl. November 14, 2003. "WISELI Department Climate Workshops: Formative Evaluation Report."

Sheridan, Jennifer; Molly Carnes; Jo Handelsman; Christine Maidl Pribbenow; and Sue Daffinrud. "WISELI Report to the Women Faculty Mentoring Program: Results from the 2003 Study of Faculty Worklife at the University of Wisconsin-Madison." In progress.

Presentations of WISELI Activities to Campus Groups

Deans' Council—9/4/2002, 12/10/2003
CALS Department Chairs and Deans—10/28/2002
ENGR Department Chairs and Deans—11/6/2002
Medical School Clinical Science Chairs—10/14/2002
Medical School Basic Science Chairs—10/8/2002
SVM Department Chairs and Deans—12/17/2002
L&S Natural Science Chairs—11/18/2002
Biological Science Deans—12/16/2003
Other Groups:
- **Department of Plant Pathology**—12/4/2002
- **University League**—11/24/2003
- **College of Engineering (CoE) Academic Affairs**—11/21/2003
- **Plan 2008 Campus Resource Fair**—5/7/2002
- **Showcase 2002**—4/3/2002
- **Academic Staff Executive Council**—3/6/2003

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December, 2003; Revised May, 2004

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- Provided guidance and assistance in resolution of issues for five senior women, preventing departures, resignation from leadership positions, and possible lawsuits; assisted in two tenure cases that have been resolved successfully.

- Awarded eight new Celebrating Women in Science & Engineering grants. One award was used to bring Prof. Virginia Valian to campus for a series of meetings with department chairs, high-level administrators, and women faculty, in addition to a well-attended public lecture.

- Advice and expertise was sought out by Office of the Provost in the creation of an exit interview protocol and instrument for faculty leaving employment at the UW-Madison.

- Enhanced the WISELI seminar where research on women in science and engineering is presented and discussed by moving to a larger space, adding a third seminar each semester, and providing an opportunity for continued discussion as a follow-up to each lecture.

- In partnership with the Graduate School, provided funding for 4 men and women faculty during vulnerable junctures in their research through the Life Cycle Research Grant initiative.

- Continued an ethnographic study of men and women faculty in science and engineering that has resulted in one peer-reviewed publication to date, with more in the pipeline.

- Analyzed in-depth interview data from a stratified random sample of 41 women faculty and academic staff in the sciences and engineering.

- Completed and evaluated semi-structured conversations with 40 of the 81 women full professors in the biological and physical science divisions.

- Began discourse analysis of men and women's conversation in naturally-occurring academic meetings.

[1] Event took place March 1, 2004.

II. Comments from Campus Leaders about WISELI

III. Activities: Status of WISELI Initiatives

A. Workplace Interactions

Climate Workshops for Department Chairs

- Description of workshop and current materials (including the on-line departmental climate survey) are attached (Appendix 1). The workshop provides chairs with national- and campus-level data about climate and gender biases as well as the opportunity to conduct an electronic survey to assess their own department's climate. The discovery-based approach involved chairs working in small groups to devise solutions to each others' climate problems.
- In 2003, we completed designing and piloting this workshop. Design and materials were complete by August 2003. Three department chairs participated in the pilot sessions on 9/11/03, 9/23/03, and 11/4/03. A formative evaluation report based on the pilot sessions was completed on 11/14/03, and is attached in Appendix 1.
- In 2004 we will begin offering the workshop series to department chairs. We have partnered with the Office of the Provost to offer the first session of the workshop on 3/30/04 to all department chairs through the *Academic Leadership Series.* Chairs who are interested in continuing to work on climate in their departments will be invited to complete the workshop series by administering the climate survey to their department, and examining the results in future workshop sessions.
- We met with the Provost, Chancellor, and Deans to provide a preliminary report on the climate findings from the *Faculty Worklife* survey and to present the plan for implementing the Climate Workshops for Chairs and Directors. The presentation was met with enthusiasm and six deans have requested that we meet with their department chairs in early 2004 to make the same presentation.

Workshops for Search Committee Chairs

- Description of workshop is attached in Appendix 2, along with the current version of the workshop materials (Guide and Brochure.)
- In 2003, we completed designing and piloting this workshop. Design and materials were completed by July 2003. Eight faculty members participated in the three-session pilot on 7/23/03, 8/20/03, and 8/27/03. We have partnered with the Office of the Provost and UW Communications to reproduce the Guide and Brochure for wider distribution. We have identified faculty and staff who can facilitate the training sessions, and are training these facilitators.
- In 2004, we will begin training search committee chairs. Deans have identified search committee chairs within their schools, and are sending their names to the Office of the Provost; training sessions with the chairs will begin in February 2004. Deans have agreed to "strongly encourage" all search committee chairs to complete the training.

Workshops in Building Effective Research Teams

- In 2004 we will begin work on this training session. The Graduate School has enthusiastically agreed to collaborate in the development of these workshops. We proposed including this training in the *Graduate School Seminar Series*, a visible series respected among researchers, and the Deans of the Graduate School accepted this proposal. We will create a design team and anticipate piloting the workshop in summer 2004.

B. Life-Career Interface

Life Cycle Grants

- WISELI continues its partnership with the Graduate School for these awards. In 2003 we ran two competitions. In the Spring 2003 competition, six proposals were submitted and two were funded. In the Fall of 2003, no proposals were submitted.
- In 2004, we will offer one or two more Requests for Proposals (depending on how many awards are made.) An evaluation of existing awardees (some of whom will have completed their awards) will be made, and a report made to the Graduate School. Formally turning the program over to the Graduate School will be negotiated in late 2004/early 2005.
- In 2004, we will begin investigating ways to incorporate a specific life event—birth/adoption of a child—into the program or will begin designing a new program to deal with this issue. The Committee on Women in the University is also looking at this issue (in terms of parental leave), but we will focus on *research support* during the time when a child enters the faculty member's home. In 2003, we had to decline the requests for support from faculty members who applied for a Life Cycle Research Grant to do the recent birth of, or impending birth of, a child (see the summary included in Appendix 3.)

Time-Stretcher Services

- A service of this type has been developed by the University of Wisconsin Hospitals. During design of our Workshops for Search Committee Chairs, we discussed the compilation of a book of community and academic time-saving resources with the Associate Vice Chancellor for Faculty and Staff Programs and the New Faculty Services Coordinator, and will turn our attention back to this in the coming year.

C. Development, Leadership, Visibility

Celebrating Women and Science and Engineering Grants

- This program is designed to increase the visibility of women scientists and engineers, with a special emphasis on increasing access to role models for graduate students and postdoctoral fellows This program is funded entirely

through the contributions of five schools/colleges housing science and engineering faculty at the UW-Madison; no NSF funds are used.

- In September 2003, the second Call for Proposals for this grant series was issued. Seven applications from four colleges were received, and six were funded. Some funds were put aside for requests that come in during the Spring 2004 semester.
- Through this program we co-sponsored a campus visit by Virginia Valian, Professor of Psychology and Linguistics from CUNY Hunter College in October, 2003. The day-long visit included meetings with deans, department chairs, high-level administrators, and women faculty. A public lecture attracted over 170 faculty, staff and students from all over campus. The visit was a large success, and has continuing repercussions throughout campus as more faculty, staff and administrators have been exposed to Valian's work in *Why So Slow?* Attached in the appendices (Appendix 4) is an internal evaluation of the luncheon for women faculty at which Valian spoke.
- The next call for proposals will go out in late spring, 2004, for the 2004/05 academic year.

Study the impact and feasibility of moving outstanding non-tenure line researchers into faculty positions

- As an exploration of the feasibility of developing a systematic process for moving qualified non-tenure-line staff into faculty positions, WISELI has worked with four staff members as case studies of the process for doing conversions. As we hoped, these cases have illuminated the attitudinal, financial, and administrative barriers that make such conversions rare and difficult.
    - One case went through discussions with the Associate Dean in the appropriate colleges where she would have held joint appointments before the individual changed her mind.
    - One of the cases failed to move forward, because despite departmental- and dean-level support, the confounding issue of promotion on the basis of teaching arose and a mutual decision was made not to press forward.
    - One case was successful: an academic staff member in the Department of Radiology was successfully converted to a tenure-track assistant professor position, including commitment of the Medical School to start-up support and space.
    - The other case is active and systematically moving forward; the person is currently preparing her research and teaching statements and her department will vote on her tenure in early 2004.

  WISELI leaders have been intimately involved in this process, meeting with the department chairs and providing detailed advice on tactics to the candidates. In the 4th case, WISELI has provided guidance and editing of the tenure documents.
- Administrative difficulties identified include achieving tenure for work based on scholarship in teaching, which is extremely difficult to do in the sciences. The attitudinal difficulties include: (1) helping existing departmental faculty to view the staff member as a colleague—a required attitudinal shift as their vote is required to make a successful conversion, and (2) the willingness of women academic staff themselves to challenge the status quo in their departments.

- To alleviate one of the financial hurdles for track conversion cases, WISELI convened a meeting with the Dean of the Graduate School and the Provost in February 2003 to discuss the commitment of both offices to contributing to start-up packages for academic staff-to-faculty conversions. Both administrators agreed that creating good start-up packages is essential to the success of the conversion, and agreed to contribute if such a conversion occurs.
- WISELI will continue to work on academic staff-to-faculty conversions during 2004 on a case-by-case basis, as qualified and interested candidates are identified. The number of possible conversions will be estimated using data from the Academic Staff version of the campus climate survey.
- This initiative will result in a "roadmap" for interested academic staff in making a conversion to the tenure-track. We will work with the Academic Staff Executive Committee (ASEC), with whom we have been building connections, so that this "roadmap" can be included in their collection of academic staff development resources (expected in year 5.)

Senior Women Faculty Initiative

- As of December 2003, WISELI representatives have met with 40 of the approximately 82 women full professors in the biological and physical sciences (49%). We have collected CVs from most of them, and are working with individual women on issues raised at the meetings, as appropriate. These efforts contributed to resolution of most of the specific issues that were brought to us by the senior women faculty members who attended, including: a successful department change; the restructuring of a work environment to improve climate; mediation of gender-based salary disputes; specific advice and strategies for negotiating an excellent retention package; and several meetings with deans and a department chair intended to resolve discrimination. This "ombuds" role filtered down to junior faculty as well, as we assisted women with their tenure issues.
- Notes from these meetings have been compiled into an internal report by our Evaluation Team, and presented to the Initiative leaders in July, 2003. The confidential report is attached in Appendix 5.
- In 2004, we plan to continue meeting with the remaining 42 senior women faculty, at the rate of about 5-10 per semester.
- In 2004, we plan to convene a meeting/reception for all women who participated in the conversations, in order to (1) formally thank them for their participation; (2) share with the women some of the themes that emerged from the discussions; and (3) foster the networking begun during the meetings. We plan to hold a similar reception each year.
- We are developing a paper about our discussions with Senior Women faculty. We plan to describe the motives for the initiative, the process we used to meet with them, the costs and benefits of doing this, and the outcomes (including unexpected outcomes) that emerged. No specific issues or themes will be included in the paper, as the discussions were confidential and not meant to be used for research purposes.
- We are also considering a research project on the process and people involved in the "ombuds" role played by WISELI's leaders in resolving appalling climate and

discrimination problems that came to light in our meetings with senior women. Despite a number of formal ombuds offices on campus, some of the issues we dealt with never entered the formal channels. The hope is that a scholarly analysis will reveal processes for discovering problems, identify characteristics of people who can effectively assist women in addressing these problems, and teach us how to best support and sustain such informal ombuds services.

Nominations and Awards for Women Faculty

- In 2003, we drafted a brochure for women in the Sciences & Engineering called "Advancing Your Career Through Awards and Recognitions: A guide for women faculty in the sciences & engineering." It contains a short description of the steps one must take to be eligible for awards, as well as examples of the types of awards for which one might be nominated at various times in the career. This brochure is in the process of being critiqued and updated and will be widely distributed upon its completion; in addition, the template will be freely available to other institutions, so that it can be adapted to different campuses. A companion brochure for mentors of women in the sciences and engineering will follow. The draft brochure is attached in Appendix 6.
- In 2003, we sent a letter to all senior women faculty in the biological and physical sciences encouraging them to consider nominating themselves, and women colleagues, for important campus awards and honors. We offered to give advice to women wanting to strategize about securing nominations for themselves or others; approximately six women contacted us for this purpose.
- As a result of discussions at the April NSF meetings, we began working with the Hunter College Gender Equity Project, and the University of Michigan ADVANCE project, to create a database of major awards. In July, when Hunter was ready to begin designing the database, we sent them the list of awards we had compiled.
- WISELI staff have assembled a nomination package for a senior woman for a named professorship (decision to be made in 2004.)

Endowed Professorships for Women in Science

- We have verified that these professorships are on the chancellor's list of fundraising priorities for the current "Create the Future: The Wisconsin Campaign" capital campaign.

Leadership Development of Non-Tenure Line Women in Science and Engineering

- In 2003, WISELI continued to offer professional development opportunities to members of our academic staff community. We sent people to WISCAPE courses (e.g., "A Framework for Understanding Campus Climate"; "Creating a Campus Culture for Change"; "Hail to the Chiefs: Leadership Insights From Those Who Have Seen Everything.") and offered to send staff to the Wisconsin Women in Higher Education Leadership (WWHEL) conference (although no one elected to attend.)

- To support the academic staff member who prepares our institutional data, we are cost-sharing a graduate student project assistant. This should allow the staff member to perform more of her own research on gender.
- WISELI submitted two nominations for outstanding women academic staff members to receive campus-level awards (one a "distinguished service" award, the other a teaching award.) Both nominations were successful.
- Academic staff and students are welcome to all public WISELI events.

D. Overarching

Establish the Women in Science and Engineering Leadership Institute (WISELI)

- ***Leadership.*** Having top-level faculty leadership to advance WISELI's agenda is invaluable. Co-PIs Molly Carnes and Jo Handelsman are busy, productive, well-known, and well-respected scientists at UW-Madison. They are the face of WISELI on campus and are frequently consulted by the campus administration, faculty, and staff regarding gender issues. This ensures that WISELI is central and not peripheral to campus activities, values, and agendas.

  Although they have many commitments beyond WISELI (see the attached Current and Pending Support statements in Section VIII), their philosophy regarding their many commitments is simple. The stronger they are as scientists, educators, administrators, campus citizens, and national figures, the more effective they will be in advancing WISELI's agenda. It is precisely because they are involved in many other activities of high visibility that they have been able to build strong partnerships with the campus administration and scientific community. For example, Molly Carnes's visibility in the Medical School is critical to her credibility. The Medical School is one of the "higher status" units on campus, and because much of basic biology at UW-Madison is housed in the Medical School, the Medical School administration and faculty are key to our success. Therefore, being a highly respected scientist, physician, and administrator in the Medical School provides Carnes with instant respect from biological scientists across campus. Carnes led a campus-wide Cluster Hiring initiative that resulted in recruitment of three new tenure-track women faculty in three different departments in two different schools (a basic mycologist, a molecular biologist studying steroid receptors, and an historian of science). She served on the search committee for a new Dean of the School of Pharmacy, and exerted her influence in myriad ways in order to ensure that women were included in the pool and the short list. Indeed, a woman was ultimately chosen and hired to be Dean of Pharmacy. As a Center Director, she has also been able to steer additional and perhaps invisible resources toward WISELI including additional staff and student support for WISELI's efforts.

Jo Handelsman is a well-known and respected basic biological scientists on campus. Her appointment as a Howard Hughes Medical Institute Professor brings with it the prestige of the HHMI name and the respect of the scientific community for an honor received by only 20 basic scientists in the United States. The stature accompanying such a singular honor imbues her voice for women's issues with power. Although the HHMI professorship has added substantially to her responsibilities, it has enhanced, not diminished, her impact on WISELI. She consistently integrates WISELI's agenda into all her efforts in research and teaching and the HHMI professorship expands the opportunities to accomplish this. For example, Handelsman visited MIT in early 2004 to give a talk on education reform. While there, she met with a group of women faculty, staff, and students to discuss women's career issues. She gave a research seminar at Harvard Medical School and met there with women as well. She is publishing a paper on education reform that will be published in *Science* magazine (4/23/04 issue); her coauthors include Shirley Tilghman, President of Princeton University. The appearance of this paper will enhance Handelsman's visibility and credibility on all issues (*Science* magazine serving as a gold standard of excellence in all aspects of science), and the collaboration with Tilghman opens some important doors to future collaborations on issues of women in science.

Handelsman has a number of campus responsibilities, but each was accepted for strategic reasons and we expect them to have significant payoff for WISELI because they provide her direct access to the Provost and Chancellor, or directly affect advancement of women. For example, she served as chair of the search committee for the new Dean of the Graduate School, and played a significant role in the selection of a candidate who is a powerful advocate for women and their academic advancement. In addition, she served on a search committee for the Chemical Biology Cluster Hire and once again influenced the hire of two women in the physical sciences.

When Handelsman was selected as an HHMI Professor, we discussed the possibility of her being replaced in the leadership of WISELI because of the demands on her time. The leadership of WISELI agreed that her political connections on campus, long history of effecting change, stature as a scientist and educator, and her newfound status as an HHMI Professor were indispensable to WISELI. Her WISELI appointment was therefore reduced from 40% to 30% to accommodate her new commitments and sought to use her WISELI time strategically and judiciously. This has proven to be a good decision.

Carnes's and Handelsman's hands-on leadership of WISELI's work is essential. They are always present for meetings with the Provost, the Chancellor, the Deans, and Chairs, and they chair the Leadership Team meetings each month. Carnes provides most of the day-to-day leadership and administration of WISELI, in partnership with Sheridan. Handelsman chaired the design teams that developed the search committee chair training and department chair climate training. In collaboration with WISELI staff member Eve Fine, Handelsman wrote, compiled,

and selected the materials for the chairs. Handelsman is leading the design team for the laboratory management workshops, which will be implemented in the '04-'05 academic year. Carnes is training search committee chairs and Handelsman is training department chairs, both in collaboration with the Provost's Office. Carnes and Handelsman met with half of the senior women in science and engineering on campus last year. Carnes initiated the productive collaboration between WISELI and the Diversity Affairs Office in the College of Engineering. These various activities bring Carnes and Handelsman in contact with many members of the scientific community on campus and strengthen WISELI's visible and central role in changing the campus climate.

Originally, co-PIs Carnes and Handelsman expected to share some of the WISELI leadership duties with several other faculty members comprising the Leadership Team, and appropriated the budget accordingly. As WISELI became established, it became unnecessary to provide such support and funds were re-budgeted to provide more administrative support to the PI's and Research Director, Dr. Jennifer Sheridan, to accomplish the evolving and time-consuming initiatives. As the accomplishments in the past year confirm, these adjustments were successful. The LT members have continued to be allies and supporters. They have taken on increasing levels of leadership on campus, helping us to "infiltrate" many important committees. They have also provided invaluable ideas and advice in many areas.

In short, Handelsman and Carnes are providing outstanding leadership for WISELI, from hands-on management of initiative design and implementation to visible, charismatic stewardship at the campus level. Their leadership of WISELI is the most important and successful part of the initiative.

- ***Center Status.*** In summer 2003, our proposal to have WISELI recognized as an official University of Wisconsin research center was approved by the University Academic Planning Council.
- ***WISELI Seminar.*** The WISELI seminar series was quite popular, and we added an additional session each semester, as well as a discussion session the week following a seminar (in cooperation with the Engineering Learning Center.) In 2003 the following speakers presented their work at the seminar:
  - Rima Apple, Professor, School of Human Ecology**. "**Women, science, and the home: A history of women scientists' early years in academia"
  - Shelley Correll, Asst. Professor, Dept. of Sociology. "Cumulating Disadvantages: Gender Stereotypes, "Small Inequalities," and Women's Careers"
  - Anne Miner, Professor, School of Business. "Local interventions to enhance women's role in university science, 1973 versus 2003: Confessions and reflections of Stanford's long-ago special assistant to the president for women"
  - Ramona Gunter, WISELI Research Assistant. "Science Faculty Talk about Self, Home, and Career"

- Jennifer Sheridan, WISELI Research Director. "Faculty Worklife at the University of Wisconsin-Madison: Preliminary Findings"

- ***WISELI Website.*** In 2003, the website continued to grow. We continue to post news about UW-Madison women scientists and engineers, and to post events related to women in science (WISELI sponsored or not.) Our web counter shows over 3000 hits as of the end of 2003.
- ***WISELI Listserv.*** The WISELI listserv has become a reliable way to communicate with our affiliates. Other organizations (e.g., the Provost's Office, the UW-Madison Oral History Project, and others) have been asking us to post notices to our listserv to further inform our affiliates of events and opportunities. At the end of December, 2003, we have 196 affiliates on our listserv.
- ***Working Web Site (WWS).*** We compile resources, post working documents, provide links to sites and resources of interest, and more on our Working Web Site. This site is password protected. We give access to the WWS to persons on a case-by-case basis, and try to limit access especially to off-site persons. It has become an effective way to share our working documents and research with interested parties before the documents are ready to go "public."
- ***Outreach to campus/national groups.*** We have presented to many groups about WISELI and our activities. A list of our publications and presentations is attached (Appendix 7.) Some of the presentations about WISELI itself include:

  - "The University of Wisconsin-Madison ADVANCE Program: Progress to Date." June, 2003 presentation at the WEPAN meetings, Chicago.
  - "NSF ADVANCE at UW-Madison: WISELI Activities." September, 2003 presentation at the 25th anniversary of the Women in Computer Science and Engineering Organization, Berkeley.
  - "Increasing Representation and Advancement of Women in Academic Science and Engineering Careers through Institutional Transformation: The NSF ADVANCE Award at UW-Madison." November, 2003 presentation to the University League, Madison.
  - "WISELI." November 2003 presented at the University of Washington's Center for Institutional Change (CIC), Seattle.

  In addition to these activities, we consult with numerous campuses about our ADVANCE project and about gender equity in the sciences and engineering more generally. Some sites we have helped include: University of Texas Medical Branch, Indiana University, Utah State University, University of Texas at El Paso, University of Illinois at Chicago.

Documentary Video

- The Year 1 video is complete; two copies were sent to NSF in December 2003.
- We have begun compiling video tapes of WISELI events and lectures, including each WISELI seminar presentation and the Virginia Valian public lecture.
- In 2004, we will focus on the video documentation of WISELI's many active initiatives, and begin compiling a combined year 2-and-3 video in Fall, 2004.

- In Spring 2004, we plan a public viewing of the video. It will be a well-publicized event, including possible coverage by local news stations and print media.

Evaluation/Research

- ***Study of Faculty & Academic Staff Worklife at the University of Wisconsin-Madison.***
  - The faculty portion of the survey was in the field from February – June 2003. Data were coded and returned to WISELI in July 2003. Overall response rate was 60.3%.
  - The academic staff portion of the survey was in the field from April – July 2003. Data were coded and returned to WISELI in September 2003. Overall response rate was 47.6%.
  - Faculty results are almost all compiled; a preliminary report of 14 of 17 sections is available on our password-protected working website, http://wiseli.engr.wisc.edu/working . The userid is wiseli, password is gizmo1.
    - We have begun sharing these results with campus as we have compiled them. We have reported to the Women Faculty Mentoring Program, the WISELI Seminar, and the Deans' Council. We have invitations to present findings in 2004 to many other groups on campus.
  - Academic staff results will be compiled in 2004.
  - An executive summary of results will be posted on the WISELI website. Detailed results will be available upon request. We are working with the UW Communications office to ensure that any media attention the results attract are handled properly.
- ***Interviews with UW-Madison women in science & engineering.***
  - "The Culture and Climate for Women Faculty in the Sciences and Engineering: Their Stories, Successes, and Suggestions." Current draft is under revision. Permission from the participations must be obtained to use the quotations in the paper before it can be distributed.
- ***Ethnographic Study.***
  - Two laboratories are currently being observed. The study has been extended to include not only interview data from observation participants, but also includes observations of the lab personnel in their classrooms.
  - "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." Presented at the Women in Physical Sciences peer mentoring group meeting, May 2003, Madison.
  - "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." Presented at the Gender, Science, and Technology International Conference, May 2003, Norway.
  - "Science Faculty Talk about Self, Home, and Career." Presented at the WISELI Seminar October 2003, Madison.
  - "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." Accepted for publication in the journal *Gender Issues*; draft is attached in Appendix 9.

- A new paper on gendered communication in the lab setting is underway.

- ***Discourse Analysis of the "Ignoring-my-ideas" Phenomenon.***
  - Many meetings (female-only meetings as well as mixed-gender meetings) have been videotaped and transcribed, and are undergoing analysis. Research is focusing on how an idea is "taken up" by a group, in order to more accurately understand how such ideas are ignored when presented by women. In the future, collaboration between this study and the ethnographic study described above is a possibility.
  - "Gender and Language in/as/on Academic Science: Combining Research with a Commitment to Institutional Change." Presented at the Perception and Realization in Language and Gender Research Conference, July 2003, East Lansing, MI.
  - "Gender and Talk: Looking Back and Looking Forward." Presented at the Women's Health Forum of the UW-Madison Center for Women's Health and Women's Health Research, September 2003, Madison.
  - "Gender and Language in/as/on Academic Science: Combining Research with a Commitment to Institutional Change." In progress.
  - "Getting our Voices Heard: Patterns of Participation in University Meetings" will be presented at the WISELI seminar in February, 2004.
- ***Study of Career Choices in Engineering.*** A new research study, designed by Prof. Amy Wendt (WISELI Leadership Team member.) She will interview women graduate students, postdocs, and newly-hired junior faculty in Engineering at the UW-Madison and the University of Washington. The goal of the study is to understand what factors women consider when deciding whether to pursue a career in academic engineering, and how distinctive features of the ADVANCE programs at the two institutions are affecting those choices.
- ***Examine the patterns of assigning institutional resources for uneven distribution by gender.***
  - Collection of data on space for faculty in the biological and physical sciences almost complete as of 12/31/03. We have data from the College of Engineering, School of Pharmacy, and School of Veterinary Medicine. We will receive data from the College of Letters & Sciences, College of Agricultural & Life Sciences, and Medical School in early January.
  - In 2004/2005, we plan to examine teaching load and assignment of teaching/clinical assistants, by gender.
  - In 2004/2005, we plan to examine distribution of University grant funds.
- ***Evaluation of Existing Gender Equity Programs.*** We proposed to evaluate nine campus programs related to gender equity. Data from the Faculty and Academic Staff Worklife surveys will be the primary source of information about these programs. These data were released to us in Summer 2003, and thus evaluation of these programs began after the preliminary analyses of the data. The programs we will evaluate, with an expected completion date, include:

  1. Gender Pay Equity Study. We plan to use survey results to assess perceptions of the gender pay equity exercise of 2001/02. Expected completion 2005.

2. Sexual Harassment Information Sessions. We plan to use survey results to assess perceptions of the effectiveness of the training. Combined with reported rates of sexual harassment on campus, we will do a more in-depth analysis if warranted. Expected completion 2005.
3. Provost's Climate Initiative. We plan to use survey results to evaluate. Expected completion 2005.
4. Dual Career Couples. We plan to use survey results, combined with the qualitative data from interviews to assess the success of this program, and make recommendations where appropriate. Expected completion 2004.
5. Tenure Clock Extensions. We plan to use survey results, combined with data from the Office of the Provost and Office of the Secretary of the Faculty, to assess the success of this program. Expected completion 2004.
6. Campus Childcare. Evaluation of campus childcare continues. We tracked developments in the Office of Campus Child Care, and explored options for including room for infant/toddler care and/or a lactation room in the planned renovation of a building on the Engineering campus (we are sponsoring an Industrial Engineering student project to further assess this possibility.) In 2004, we plan to review the master Child Care Plan being developed for the campus (available by summer, 2004.)
7. Split Appointments. We plan to use survey results, probably combined with personal interview data in our evaluation of this program (as so few faculty members are involved.) Expected completion 2005.
8. WISE Residential Program. We are working with current and former directors of this program for undergraduate women in the sciences and engineering to develop programs specifically aimed at increasing the presence of underrepresented minority women in the program. Expected completion 2005.
9. Women Faculty Mentoring Program. We have completed a preliminary assessment of the program from the faculty survey data, and presented it to the planning committee in September 2003 (draft attached in Appendix 10.) A full report will be available in 2004.

These programs are not under the control of WISELI, and any issues we uncover or recommendations we make are purely advisory. We have been cultivating relationships with the units implementing these programs, in order to increase the chances that recommendations will be implemented because they are received in the spirit of collaboration and not criticism.

Workshops for Faculty and Staff

- National workshops for women and administrators will be built on our local workshops for search committees, department chairs, and principal investigators.

IV. Findings: Value Added

Tangible outputs

- Workshops. WISELI has directly contributed two new campus-wide training workshops (training for chairs of hiring committees, and a workshop on departmental climate for department chairs), and has integrated them into the existing structure of training through the Office of the Provost.
- Research. Through the interviews with women scientists and engineers, and the surveys of faculty and staff worklife at UW-Madison, WISELI is providing *data* to faculty, staff, and administrators regarding the experience of women in the sciences and engineering on campus, often for the first time.
- Virginia Valian's visit. WISELI was the main organizer and fundraiser for the campus visit of Virginia Valian on Oct. 3, 2003. This visit continues to have profound repercussions on campus. For example, the Associate Vice Chancellor of Diversity and Climate has scheduled training sessions with divisional committees (in order to have a discussion about unconscious gender and racial biases, and the effects of these biases on evaluations for tenure) as a *direct* result of Valian's visit.
- Evaluation of existing programs. As the results of the faculty and staff surveys are compiled, WISELI has begun evaluating existing gender equity programs on campus (see example of evaluation for the Women Faculty Mentoring Program, Appendix 10.) As we move to investigate more of these existing programs, the campus will have an outside evaluation of many of these programs for the first time.
- Direct effect on hiring women due to presence of WISELI on campus. The presence of WISELI within the College of Engineering has been cited by the Dean of Engineering and others in the College as having a direct influence on the recruitment of more women faculty to the College than ever before in 2003 (see supporting letter in Section II.)
- LSAMP grant. WISELI collaborated with the Provost and Prof. Douglass Henderson of the Diversity Affairs Office (DAO) in the College of Engineering (with whom we share contiguous office space) on the preparation of an NSF Louis Stokes Alliance for Minority Participation (LSAMP) grant. Our interest in the grant was to include issues of gender in the proposed AMP program, in order to create a pipeline of *diverse women* for science and engineering academic positions. Although no WISELI resources were used in the preparation of this grant, Dr. Carnes was able to secure a commitment to partially run the grant through WISELI's department number. Dr. Handelsman's HHMI program also integrates with the proposed LSAMP program. This is not a commitment of resources, but rather an arrangement that may serve to prolong WISELI beyond the 5-year ADVANCE commitment and development of a partnership that locally has already proven to be very strategic in advancing issues of both gender and ethnic/racial divserity. Dr. Carnes has a 10% commitment (no salary) to the grant, should it be awarded. This commitment does not diminish her time commitment to WISELI.

- Movement on tenure-line conversion. WISELI has made it possible for a woman Distinguished Faculty Associate to be considered for a tenured position in her department. Her department will vote on her case early in 2004; this would not have moved forward without WISELI's direct involvement. WISELI also provided strategic guidance for a successful conversion of a non-tenure track academic staff woman to assistant professor on tenure track in the Medical School, and worked with two other possible candidates for conversion (although they elected not to pursue the issue after these initial discussions.)
- Establishment of WISELI as a formal Center. WISELI is designated as a formal research center within the College of Engineering. This places the directors of WISELI on par for deliberations and resource commitments with directors of other Engineering centers such as the TRACE Center, Materials Science Research, and the Center for Health Systems Research & Analysis. Thus, by the power of the position, decisions made by the Center Directors as a group will be shaped by thinking of WISELI. Grants can now be run through WISELI. This is an important step in building sustainability of WISELI beyond funding of the NSF ADVANCE program.
- Contribution to development of plan for exit interviewing. WISELI co-Directors were sought out for advice and feedback on an emerging program in the Office of the Provost to conduct exit interviews for all faculty leaving the UW-Madison. Among other suggestions, questions about climate and diversity from the WISELI survey of faculty were added to the exit interview instrument.

Elevation of gender equity as a "real" problem (increased respect for those working on the issues)

- Visibility of gender equity issues. The presence of WISELI on campus, and especially the large sum of money associated with the ADVANCE Institutional Transformation award, has increased the visibility of the issue of gender equity on our campus. WISELI has especially increased the visibility of gender issues in relation to *campus climate* and *hiring*, through our use of empirical studies to explain how subtle biases can affect women's careers in academic science and engineering. As one Leadership Team member reported to us, "I've heard faculty members (all of them male) mention WISELI and the NSF-ADVANCE in connection with hiring and promotion procedures on campus. To paraphrase one of them: 'These days you have to think about gender equity. It didn't used to be that way, but now when you're hiring or promoting someone, you have to consider that in the mix of everything else.'"
- Ability to work on issues openly. The visibility of WISELI, and the size and prestige of the ADVANCE award, has removed some of the social stigma associated with working on gender issues and allowed those who are committed to the subject the "permission" to work on these issues on campus openly. Through the ADVANCE grant, people are now getting paid to work on these issues—they no longer have to do it on their own time, in a subversive or sneaky way. The resulting validation of the work has allowed more people, who might not otherwise have done so, to become involved in issues of gender equity.
- Legitimacy of complaints. WISELI has also given increased legitimacy to women who raise issues of gender equity. In many examples (that we cannot describe in

detail due to confidentiality requirements) we or others have raised issues to top administrators of the University who have responded with aggressive action. There is an aspect to such discussions that was lacking before. It appears to us that top administrators are increasingly taking women's concerns about gender issues more seriously. They more frequently believe that women are voicing genuine complaints, and are less likely to suggest that women acquire "a thicker skin" or to require data or corroboration from a man. While this is not a tangible, quantifiable change, it certainly increases the willingness of women to raise issues and contributes to an overall level of awareness and concern about gender issues that exceeds anything we have previously observed on our campus.

- Increased accountability on gender equity issues. Because of the visibility of WISELI, and the work we are doing on issues of gender in hiring and climate especially, it is our impression that campus administrators have come to understand that they are being "watched" on these issues, though this is admittedly hard to assess empirically. Some examples supporting our impression include:
  - The addition of a new female Dean (School of Pharmacy) and Director (Gaylord Nelson Institute for Environmental Studies) is a source of great pride to our top administrators. Carnes and Handelsman, respectively, were involved in the recruitment of these women science Deans.
  - The College of Engineering has almost certainly committed to including space for a lactation room in the design for the remodeling of the Mechanical Engineering Building (to begin in 2005.) WISELI Leadership Team members have been individually endorsing this move, but having the weight of WISELI behind them may have helped to tip the balance to making sure that it is included in the plan.
  - WISELI was instrumental in bringing to the attention of high-level administrators the gender imbalance in the Wisconsin Symposium II—an important research conference held on campus that highlights the latest research in the analysis of human biology, genes, genomes, and molecules. We know that our watchfulness has already influenced the selection committee for next year's symposium and the committee has requested our assistance in achieving diversity.
- Sloan Foundation grant. WISELI Leadership Team member (and new Associate Vice Chancellor for Diversity and Climate) Bernice Durand reports that the example of WISELI inspired her (along with colleague Louise Root-Robbins, Special Assistant to the President of the University of Wisconsin System) to apply for a Sloan Foundation grant to work on gender issues surrounding the academic career.

Increased awareness of gender equity issues among women scientists and engineers

- Increased networking of women scientists & engineers. Through our seminars, grant programs, Senior Women meetings, Town Hall meetings, listserv, website, and our general outreach to the community on an individual basis, WISELI has created a network of women scientists and engineers on campus that is gaining strength. WISELI is often tapped as a place to go to for information (campus or national statistics; research on gender equity issues), advice (how to get nominated for awards; preparing an effective tenure packet; what to do when you get an outside offer), and

even advocacy for individual problems (moving to a different department; mediating a faculty governance dispute; facilitating a discussion between a chair and women faculty in a department). As we have been cataloging the different types of networking functions WISELI provides, we have been looking for ways to institutionalize this idiosyncratic, yet important, service we provide the campus.

- Increased leadership roles of WISELI senior personnel. WISELI's presence helped demonstrate the contributions of key women and helped secure appointment or election to key university administrative bodies by serving as a public example of their leadership, contributions, and qualitites.
  - Associate Vice Chancellor for Diversity & Climate Bernice Durand. In 2003, Provost Peter Spear appointed Professor Bernice Durand (a professor of Physics and member of WISELI's Leadership Team) as our first Associate Vice Chancellor for Diversity and Climate. Prof. Durand reports that she would never have accepted the nomination for the position, nor accepted the position, if not for WISELI. As she writes, "our message to senior women to consider administrative positions plus what I had already seen a year ago could be accomplished with the person-hours purchased by external funds, were major factors in my decision to accept the nomination and then the job."
  - University Committee member Patti Brennan.
  - Biological Sciences Divisional member Caitilyn Allen.
  - Campus Planning Committee Liaison Molly Carnes.
  - Committee on Women in the University co-chair Cecilia Ford.

Contributions to gender equity programs nationally

- Survey. Numerous campuses have requested our survey (UI-Chicago, UTEP, USU, UWash, VT, CWRU). One campus (UTEP) has adopted the survey with only minor modifications for use on their own campus.
- Joint Projects. We have tentatively begun negotiation with other ADVANCE sites on partnering to produce joint papers or other projects:
  - With the University of Washington, we have talked about combining evaluation efforts for our similar grant programs (Life Cycle Grants at UW-Madison, and Transitional Support Program at the Univ. of Washington).
  - We are also working with the University of Washington to look at career choices of women in Engineering, and the effects of ADVANCE on those choices.
  - Lisa Frehill (NMSU) and Jennifer Sheridan have discussed writing a paper about the NSF-required data collection associated with these grants.
  - Jennifer Sheridan has also had preliminary discussions with a faculty member at USU about working on a mathematical model of the STEM pipeline for women.
  - As UTEP implements their climate survey, we will work with them to compare results (the same survey was administered on both campuses.)
  - We have collaborated with Hunter College on the creation of a database to help ensure more women are nominated for prestigious awards in S&E.
- Advice. As new ADVANCE programs begin organizing, some have contacted us for advice (VT, UTEP). In addition, programs that have begun thinking about submitting an ADVANCE proposal for the next round have also called us, asking for our

proposal and budgets (NDSU, IU/PUI, UNebraska, Howard). Co-PI Jo Handelsman has consulted with faculty at MIT and UCLA on gender issues in education and hiring. Indiana University will be submitting a proposal as a direct result of encouragement from us. Howard University has requested and we are pleased to offer advice in developing an ADVANCE proposal.

- Leadership. WISELI co-PI Molly Carnes is on the External Advisory Team for UI-C's ADVANCE project and will spend a full day at UIC consulting and advising in September, 2004. She was also asked to be on the External Advisory Team for UI Urbana-Champagne, but declined because she is already on the board of an Illinois System school. Prof. Carnes has also been invited to give talks about gender equity in academic medicine to Indiana University, University of Texas Medical Branch, and UIC. Co-PI Jo Handelsman has given talks on gender equity in the National Academies of Sciences Summer Institute and the UW-Madison Department of Computer Sciences. She is also organizing a session on diversity in biology for a meeting at the Howard Hughes Medical Institute in 2004. She meets regularly with graduate students, faculty and staff interested in WISELI's activity at UW-Madison and other universities (Oregon State Health Sciences Center, United States Department of Agriculture, Harvard, MIT, and from labs of Howard Hughes Medical Institute Investigators).

V. Findings: Difficulties & Solutions

Administration and structure

- Time allocation of co-Directors. To be the present and visible force that they have become on campus, Carnes and Handelsman have had to make carefully weighed choices about other activities. For example, Handelsman has dedicated her WISELI work to the campus and to any activities that can be linked with trips she is making for other reasons, but has chosen not to be the national face of WISELI. Carnes and Sheridan have assumed more of this national role.
- Structure and function of Leadership Team. The role of the Leadership Team was not sufficiently clear, especially to the LT members themselves. This became quite apparent in our internal formative evaluation of the LT, completed this summer. Because their roles turned out to be more "advisory" than actually "hands-on", we have reduced the amount of funding given to the LT beginning this year (from 10%/year to 2.5%/year), reallocating funds to WISELI staff in order to implement more initiatives. In addition, we have altered the structure of the monthly Leadership Team meetings and also the reporting requirements for the Leadership Team members.

  This arrangement appears to be working well. Having additional staff has allowed greater support of LT members; they do not have to do some of the time-consuming things like setting up meetings or designing brochures that our WISELI staff can do for them. WISELI staff do NOT take over the face-to-face communication aspects of WISELI's work; rather, they are additional behind-the-scenes support for the faculty leaders. The new arrangement pays for 1.3 FTE of leadership (10 people, including PIs), 2.25 FTE of staff (3 people), and 1.0 FTE of evaluation (2 people).

- Not enough time or personnel to do everything. Given only five years to accomplish "institutional transformation" of a large and complex academic organization, we purposefully proposed and embarked on an ambitious undertaking. Our plan was literally to hit the issue of gender equity from all sides and every angle. As our record of accomplishments confirms, this has been a successful strategy. However, this approach has stretched our resources. As we do our work, and learn more about what is specifically causing gender inequity on this campus, we find that we are unable to make mid-stream adjustments or take on any new efforts even if they seem opportune because (1) we have already dedicated our resources towards existing initiatives, and (2) if we were to take on new problems, we would not meet our other goals in the 5-year deadline. We have begun addressing some of this by reallocating Leadership Team funding to hire more dedicated WISELI staff and by partnering with DAO on other NSF grants to increase STEM workforce diversity which will bring in additional resources to WISELI for work on minority women's issues. Given the momentum we have generated and the accomplishments to date, we would strongly support continuation ADVANCE funding from NSF in some form (e.g., offering

competitive renewal of the ADVANCE programs or providing tapering funds over a several year period.)

Difficulties with initiative implementation (specific and general)

- Life Cycle Grants. Through the course of administering our "Life Cycle Research Grant" program, we found a large unmet need on campus for which we have no solution. Four assistant professors applied to us for research funding to help cover work in their labs while they spent more time at home for a year with newborn children. Most of these applicants were men, and most of these applicants were planning ahead for children not yet born. We are planning to convene a working group to brainstorm alternative ways to fund these kinds of requests (most likely involving private funds.) Our first step is to use survey data to estimate the numbers of children born to junior faculty each year, so we can get an estimate of costs involved.
- Celebrating Grants. We award between 5 and 10 small grants each year so that departments or programs may bring in speakers that address WISELI's goal of "promoting the participation and advancement of women in science & engineering." Our problem with this program is that due to the large numbers of grants awarded, and our aforementioned lack of resources to do all that we would like to do, it has been difficult to do the necessary follow-up evaluation on these awards. We had planned that the awardees would do their own evaluation, but have found that once the funds are disbursed, the awardees are unlikely to fill out the necessary paperwork. Based on this, our evaluation plan for this initiative will change appreciably.

  An additional challenge with this initiative is the tendency of some departments to merely ask for funds to do "business as usual." That is, a couple of applicants who had already invited women scientists and engineers to present their work asked us for money to cover the women's cost. Presumably, this would free up funds to pay for more men in the schedule! We tried to avoid this situation by giving "priority" to those units that (1) contributed their own funds to the event, or (2) had no funds to give. Under (2) falls some student groups such as the Graduate Women in Science (GWIS). We added this message of "priority" to the RFP to signal that we wanted to see a unit's commitment to our goal of increasing the visibility of women in the sciences and engineering.
- Compromises made during institutionalization. Because of our close ties to the Office of the Provost, we have been extraordinarily successful at "institutionalizing" some of our initiatives earlier than we thought we might. This has required us, however, to modify our original plans and designs to accommodate the needs of the campus. The best examples are our two workshop series—one to train chairs of hiring committees to perform less-biased searches, and one to work with department chairs on improving climate in their units. As these workshops are offered out of the Provost's Office, rather than WISELI, we have had to forego some of the more intensive evaluation we had planned. In addition, the organization of the workshops has changed (e.g., one of the workshops was designed to be three sessions, and it has been shortened to one or two sessions.)

- Individual advocacy. As we have begun connecting with women scientists and engineers across campus, especially through our effort to meet all of the senior women professors in the biological and physical sciences, we have become a place where some women with intractable problems have come to get help. These requests for individual advocacy are problematic, because:
  1. they are very time- and resource-intensive (in addition to the time of our co-PIs, these cases use up our "goodwill" among faculty and administrators);
  2. they are difficult, if not impossible, to evaluate;
  3. deciding which cases to take on, and which ones to drop, is difficult and can leave bad feelings whichever decision is made;
  4. it has the potential of "politicizing" WISELI, which should have the image of a research organization and not an advocacy group.

  Our solution thus far has been to *document* all such cases—both the requests that we do not pursue, and the ones we do. We hope to eventually write an evaluation report juxtaposing these examples of how an "informal ombuds" works within an organization (and what can be done to support these information-rich persons), with a formal ombuds program.

Overall campus perceptions and attitudes

- Gaining support of department chairs and faculty. While we feel we have good support among higher-level administrators within the UW-Madison (Chancellor, Provost, Associate Vice Chancellors, Deans) and at the UW System level (President, Senior Vice President for Academic Affairs), and many faculty are aware of and engaged in our initiatives, we need to expand the breadth of faculty involved in WISELI. On our campus, with our strong tradition of faculty governance, a broad base of support among faculty is necessary for sweeping institutional change. Thus, with the support of our Administrative Partners (deans and upper-level administrators), we have been working to reach the Department Chairs as an entrée into departments. The deans invite us to attend their Schools' operations meetings (where deans and chairs meet) and discuss our initiatives and/or research findings, and they encourage their faculty to attend WISELI programs such as training for hiring committee chairs and climate workshops for department chairs. By meeting with chairs in this way on a regular basis, and especially working with them more closely in the climate workshops, we hope that the chair is the person who filters our messages down to the faculty, rather than imposing it upon them from the outside.

  Reaching male faculty is especially important, and we are looking at ways to expressly reach out to "sympathetic" men on campus, perhaps through creation of a "WISELI Fellows" program. The "WISELI Fellows" would be an honorific title (no funds are to be awarded) given to a faculty member who will help us further our agenda within the person's department or discipline (e.g., by watching for bias in tenure/hiring decisions, ensuring all voices are heard at meetings, helping us strategize to increase our impact among faculty, making sure women are placed on important committees, etc.)
- Gender is still not a visible issue at the bench-level. While many people feel that the presence of an ADVANCE grant on the UW-Madison campus has increased visibility

and acceptability of talking about gender issues on campus, the experience of scientists and engineers at the ground level seems to show that most faculty, administrators and staff continue to be oblivious to the way gender and other differences among people color the thousands of interactions that occur day-to-day. We seem to have succeeded in making people aware of potential gender biases at important *evaluation* points (hiring, tenure & promotion), but are having less of an impact on the *interpersonal* level thus far. We are hopeful that alerting *department chairs* to the importance of these climate issues (and, in the future, the PIs of laboratories) will have the most impact in the day-to-day interactions of faculty, staff, and students.

- ADVANCE grants perceived as being "special help" for women (and thus, unfair). We have heard this complaint from another ADVANCE site that we have visited; thus far, we have *not* heard it from anyone at UW-Madison. Aside from the individual advocacy problem noted above (which has the potential to create this perception), we think that the reason that we have avoided this type of criticism is because (1) we have tried to avoid implementing programs that benefit only women (e.g., partnering with the Graduate School to offer our Life Cycle Research Grants to men as well as women); (2) we try to be as inclusive as possible in all of our work (e.g., working together with other groups interested in diversity issues rather than separately, issuing special notices so that students, postdocs, and staff know they are welcome at our public events; leveraging funds from the Provost's Office/Graduate School in order to extend programs to social sciences/humanities faculty); (3) we have tried to keep our eye on "institutional transformation" by focusing less on initiatives aimed at individuals, and more on initiatives that aim to change a process, and (4) we have attempted to feed back our work to the affected units (departments, schools/colleges, senior women, ethnographic study participants, etc.) wherever possible.

  We consider these tactics as a way to gain additional support by joining forces with like-minded groups. Working with other groups on campus allows us to insert the "gender message" into a variety of topics—e.g., racial and ethnic diversity, curriculum and teaching issues, life/work issues, faculty governance. Furthermore, it allows us to work towards our goal of advancing a diversity of women into the academic science and engineering career.

Evaluation difficulties

- Designing evaluation of initiatives. The majority of persons who make up our WISELI community are physical and biological scientists—persons familiar with experimental methods of doing research. The kinds of evaluation they would like to see for all of WISELI's initiatives tend towards experimental designs, which are not usually possible in the social world. We fortunately have a wonderful Evaluation Director who has been able to clearly articulate what is and is not a feasible evaluation plan for each of our projects; still, there is a tension between more qualitative methods of evaluation, and the expectations of the "hard" scientists with whom we must communicate our results.

VI. WISELI Management and Infrastructure

Directors

Co-Director: Molly Carnes
Co-Director: Jo Handelsman
Research & Executive Director: Jennifer Sheridan

Staff

Researcher: Eve Fine
Research Specialist: Deveny Benting
Webmaster: Stephen Montagna

Leadership Team

Vicki Bier, Patti Brennan, Bernice Durand, Pat Farrell, Cecilia Ford, Cathy Middlecamp, Paul Peercy, Gary Sandefur, Gloria Sarto, Amy Stambach, Lillian Tong, Amy Wendt

Internal Advisor: Linda Greene, Assoc. Vice Chancellor

Evaluation Team

Evaluation Director: Christine Maidl Pribbenow

Deveny Benting, Cecilia Ford, Ramona Gunter, Margaret Harrigan, Jennifer Sheridan, Amy Stambach, John Stevenson

Administrative Partners

Chancellor John Wiley	President Katharine Lyall	Provost Peter Spear	Dean Graduate School, Martin Cadwallader
Sr. Vice President Cora Marrett	Dean Elton Aberle, College of Ag. & Life Sciences	Dean Daryl Buss, Veterinary Medicine	Dean Phil Certain, Letters and Science
Dean Phil Farrell, Medical School	Dean Jeanette Roberts, Pharmacy	Assoc Dean Terry Millar, Grad School	Assoc Dean Tim Mulcahy, Grad School
Dean Robin Douthitt, School of Human Ecology	Dean Catherine May, School of Nursing	Prof Mariamne Whatley, Chair Women's Studies Pgm	Don Schutt, Human Resources

Campus Affiliates

Women in Science and Engineering and other supporters, through WISELI Listserv

External Advisory Team

Denice Denton, Joan King, Sally Kohlstedt, Charlotte Kuh, Sue Rosser

VII. Financial Reports

2003 Financial Report

	2002	2003	Total
Income			
NSF	$750,000	$750,000	$1,500,000
Celebrating Grants	$8,000	$14,400	$22,400
College of Engineering	$10,000	$20,000	$30,000
Salaries and Fringes			
Directors	$145,180	$115,306	$260,486
WISELI Staff	$98,419	$128,547	$226,966
Leadership Team	$69,725	$143,700	$213,425
Evaluators	$88,261	$72,110	$160,371
Travel	$9,758	$9,637	$19,395
Supplies and Equipment	$17,972	$12,348	$30,320
Initiatives			
Celebrating Grants	$249	$9,037	$9,286
Life Cycle Research Grants	$0	$57,648	$57,648
Video	$12,169	$5,160	$17,329
Survey	$0	$33,381	$33,381
Book Giveaways	$1,756	$395	$2,151
WISELI Seminar	$273	$537	$810
Senior Women Development	$172	$114	$286
Workshops	$2,015	$1,085	$3,100
Chairs' Climate Workshops	$0	$174	$174
Search Committee Chairs' Workshops	$0	$382	$382
Overhead	$198,942	$251,851	$450,793
Total Income	$768,000	$784,400	$1,552,400
Total Expenditures	$644,891	$841,412	$1,486,303

2004 Proposed Budget

	2002-03 Total	2004 Proposed	Total
Income			
NSF	$1,500,000	$750,000	$2,250,000
Celebrating Grants	$22,400	$10,000	$32,400
College of Engineering	$30,000	$10,000	$40,000
Salaries and Fringes			
Directors	$260,486	$120,600	$381,086
WISELI Staff	$226,966	$154,000	$380,966
Leadership Team	$213,425	$74,760	$288,185
Evaluators	$160,371	$79,978	$240,349
Travel**	$19,395	$17,500	$36,895
Supplies and Equipment	$30,320	$15,000	$45,320
Initiatives			
Celebrating Grants	$9,286	$10,000	$19,286
Life Cycle Research Grants	$57,648	$42,000	$99,648
Video	$17,329	$15,000	$32,329
Survey	$33,381	$0	$33,381
Book Giveaways	$2,151	$400	$2,551
WISELI Seminar	$810	$500	$1,310
Senior Women Development	$286	$500	$786
Workshops	$3,100	$1,000	$4,100
Chairs' Climate Workshops	$174	$500	$674
Search Committee Chairs' Workshops	$382	$500	$882
Overhead	$450,793	$237,618	$688,411
Total Income	$1,552,400	$770,000	$2,322,400
Total Expenditures	$1,486,303	$769,856	$2,256,160 *

*Unobligated funds to be used for Survey administered in Year 5.
** Increase in travel funds for Year 3 due to Georgia Tech ADVANCE Conference, PLUS our External Advisory meeting in June 2004.

Cost Sharing Summary (January 1 - December 31, 2002)
WISELI
Project dates: January 1, 2002 - December 31, 2002

	Cost Sharing thru 6/02	Cost Sharing thru 12/02	Total Obligation
Salaries & Fringe Benefits[1]	$ 19,535	$ 35,215	$ 45,215
Graduate Student support[2]	$ -	$ 15,550	$ 15,550
Symposium support[3]	$ -	$ -	$ 10,000
WISE Program support[4]	$ 1,097	$ 12,023	$ 28,250
Other Program support[5]	$ -	$ 8,439	$ 5,000
Indirect Costs	$ 9,388	$ 31,145	$ 46,064
Total Costs	$ 30,020	$ 102,372	$ 150,079

I certify that the cost sharing for this project is complete and accurate through December 31, 2002 and that we will meet our total cost sharing obligation of $150,000 for Year 1.

Diane Barrett

Diane Barrett, Assistant Director, Pre-Award Services
Research & Sponsored Programs

1 - Includes faculty and staff salaries and fringe benefits for the year beginning 1-1-02 through 12-31-02.
2 - Graduate student support is for: 1 Research Assistant at 50% beginning 7/1/02 through 6-30-03; 1 Project Assistant at 33% beginning 9/1/02 through 1/30/03.
3 - Funds for Celebrating Women in Science & Engineering Grant program.
4 - Includes program support and undergraduate support for the Women in Science and Engineering Undergraduate program.
5 - Includes funds for documentary video project, and survey of faculty and staff.

Cost Sharing Summary (January 1 - July 31, 2003)
WISELI
Project dates: January 1, 2003 - December 31, 2003

	Cost Sharing Year 1 Total	Cost Sharing 1/03 thru 6/03	Amount Obligated 7/03 thru 12/03	Total Obligation
Salaries & Fringe Benefits[1]	$ 35,215	$ 10,000	$ 26,000	$ 71,215
Graduate Student support[2]	$ 15,550	$ 12,274	$ 14,000	$ 41,824
Symposium support[3]	$ -	$ 6,045	$ 6,000	$ 12,045
WISE Program support[4]	$ 12,023	$ 9,989	$ 10,000	$ 32,012
Other Program support[5]	$ 8,439	$ 43,238	$ -	$ 51,677
Indirect Costs	$ 31,145	$ 36,106	$ 24,206	$ 91,457
Total Costs	$ 102,372	$ 117,652	$ 80,206	$ 300,230

I certify that the cost sharing for this project is complete and accurate through June 30, 2003 and that we will meet our total cost sharing obligation of $300,000 for Year 2.

Diane Barrett

Diane Barrett, Assistant Director, Pre-Award Services
Research & Sponsored Programs

1 - Includes faculty and staff salaries and fringe benefits for the year beginning 1-1-03 through 6-30-03.
2 - Graduate student support is for: 1 Research Assistant at 50% beginning 7/1/03 through 6-30-04; 1 Project Assistant at 33% beginning 9/1/02 through 1/30/03; 1 Project Assistant at 50% beginning 9/1/03 through 6/1/04.
3 - Funds for Celebrating Women in Science & Engineering Grant program.
4 - Includes program support and undergraduate support for the Women in Science and Engineering Undergraduate program
5 - Includes funds for documentary video project, survey of faculty and staff, and the Life Cycle Research Grant Program.

Cost Sharing Summary (January 1 - December 31, 2003)
Non-Certified Summary
WISELI

	Cost Sharing Year 1 Total*	Cost Sharing Year 2 Total**	Total Cost Sharing 1/02 - 12/03	*Amount Obligated 1/04 thru 12/04*
Salaries & Fringe Benefits[1]	$ 35,215	$ 16,956	$ 52,171	*$ 30,716*
Graduate Student support[2]	$ 15,550	$ 23,195	$ 38,745	*$ 26,968*
Symposium support[3]	$ -	$ 10,789	$ 10,789	*$ 10,500*
WISE Program support[4]	$ 12,023	$ 9,989	$ 22,012	*$ 14,562*
Other Program support[5]	$ 8,439	$ 74,898	$ 83,337	*$ 23,104*
Indirect Costs	$ 31,145	$ 61,801	$ 92,946	*$ 48,162*
Total Costs	$ 102,372	$ 197,628	$ 300,000	*$ 154,012*

* Year 1 Certified.
** Year 2 Estimates in process of certification; amounts may change slightly due to salary adjustments in 2003.

1 - Includes faculty and staff salaries and fringe benefits for the year beginning 1-1-03 through 12-31-03.
2 - Graduate student support is for: 1 Research Assistant at 50% beginning 7/1/03 through 6-30-04; 1 Project Assistant at 33% beginning 9/1/02 through 1/30/03; 1 Project Assistant at 50% beginning 10/1/03 through 6/1/04.
3 - Funds for Celebrating Women in Science & Engineering Grant program.
4 - Includes program support and undergraduate support for the Women in Science and Engineering Undergraduate program
5 - Includes funds for documentary video project, survey of faculty and staff, the Life Cycle Research Grant Program, and Miscellaneous support from the College of Engineering ($10,000/year).

VIII. P.I.'s Current and Pending Support

Jo Handelsman
Current and Pending Support
January 2004

NSF: Co-PIs R. Ruess, J. Banfield, and W. Metcalf; $512,484 (UW portion); 1/1/02-12/31/05; A cold microbial observatory: Collaborative research in an Alaskan boreal forest soil (5%)

Howard Hughes Medical Institute: $1,000,000; 9/02-9/06; Biology Brought to Life: Raising a new generation of teachers and researchers. (25%)

Biotechnology and Research Development Corporation: $428,586; 10/1/03-9/30/06; Microbial resources in Alaskan soils: New fields for biotechnology (5%)

NSF: Co-PI Mary Carnes; $3,748,973; 1/1/02-12/31/06; ADVANCE Institutional Transformation Award (30%)

Hatch-Multiple Investigator Interdisciplinary: Co-PIs M. Filutowicz, K. Raffa, R. Burgess; $168,799; 10/1/02-9/30/06; The Trojan horse and the gypsy moth: harnessing killer plasmids for targeted study of microbial communities (5%)

Hatch: $90,262; 9/30/01-9/30/04; Microbial communication in the rhizosphere community (5%)

Valent Biosciences: Discovery of synergists of *Bacillus thuringiensis*; Co-PIs J. Handelsman and K. Raffa; 6/1/02-5/31/05; $266,203 (5%)

The David and Lucile Packard Foundation: (co-PIs R. Goodman and J. Clardy); $960,000; 7/1/99-6/30/04; Using chemistry and biology to explore the soil metagenome (10%)

CARNES, MARY L. (MOLLY)

Active:

Project Number: 0123666 **Type:** Cooperative agreement P.I.: M. Carnes, 50% effort
Title: ADVANCE, Institutional Transformation Award
Source: National Science Foundation
Dates of Project: 1/1/02 – 12/31/06 **Annual Direct Costs**: $515,347
Goals: This grant proposes to use UW-Madison as a living laboratory to study why we have been relatively unsuccessful and how we can become more successful in recruiting, retaining, and advancing women in academic science and engineering.

Project Number: 213-98-0017 **Type:** Contract P.I.: M. Carnes, 17% effort
Source: US PHS, Office on Women's Health
Title: University of Wisconsin National Center of Excellence in Women's Health
Dates of Project: 10/1/98 - 9/30/06 **Annual Direct Costs:** $145,000
Goals: This contract designates the UW as having one of 18 National Centers of Excellence in Women's Health.
The goals are to educate women to be knowledgeable consumers of health care; to advocate for models of clinical care model that promote optimal health of all women; to develop women leaders in academic health sciences; to develop a national multidisciplinary agenda for women's health research; and to educate providers to provide culturally sensitive care to diverse populations of women.

Project Number: T32 AG00265 **Type:** NRSA Institutional Training Grant P.I.: M.Carnes, 10% effort (no salary)
Source: National Institute on Aging
Title: Women's Health and Aging: Research and Leadership Training Grant
Dates of Project: 7/99 – 6/04 **Annual Direct Costs:** $214,922
Goals: This grant provides post-doctoral salary and research support for four MD or PhD fellows per year.
The goals are to develop academic leaders in older women's health by supporting them to do progressively independent research in the laboratories of established scientists. Effort devoted to this grant integrates with the goal of the DHHS Center of Excellence contract.

Project Number: K12AG19247 **Type:** Institutional Mentored Scientist Award P.I.: M. Carnes, 10% effort (no salary)
Source: National Institute on Aging
Title: Women's Health and Aging: Clinical Scientist Development Program
Dates: 9/01/02 – 8/31/07 **Annual Direct Costs:** $339,300
Goals: This grant provides salary support for clinical scientists to do research in women's health and aging. The goal is to develop a cadre of researchers in the area of older women's health who are excellent scientists imbued with an interdisciplinary perspective, effective communicators, and managers of independent research programs. Effort devoted to this grant integrates with the goal of the DHHS Center of Excellence.

Pending:

Type: Louis Stokes AMP PI: P. Spear; co-PI's: M. Carnes, 10% effort (no salary), D. Henderson
Source: National Science Foundation
Title: Wisconsin Alliance for Minority Participation
Dates: 5 years from start of funding **Annual Direct Costs:** $287,146
Goals: This grant will support efforts to enrich the pipeline of academic science and engineering with diverse trainees by drawing together 21 institutions of higher education in the State of Wisconsin to commit to doubling the number of underrepresented minority students awarded baccalaureate degrees in science and engineering with an eye toward graduate education. Efforts devoted to this cooperative agreement are congruent with Dr. Carnes' service as a faculty member to the State and University of Wisconsin.

IX. Quantitative Indicators of Activity and Progress

X. Appendices

Appendix 1: Materials for Chair Climate Workshops

Appendix 2: Materials for Search Committee Chair Workshops

Appendix 3: Life Cycle Research Grant Summary

Appendix 4: Virginia Valian Luncheon Evaluation

Appendix 5: Senior Women Faculty Notes

Appendix 6: "Advancing Your Career Through Awards and Honors"

Appendix 7: WISELI Publications and Presentations

Appendix 8: “As Balancing Act and Game”

Appendix 9: Women Faculty Mentoring Program Evaluation

Benefits & Challenges of Diversity

(Used in Climate Workshops for Department Chairs)

Benefits and Challenges of Diversity

The diversity of the University's faculty, staff, and students influences its strength, productivity, and intellectual personality. Diversity of experience, age, physical ability, religion, race, ethnicity, gender, and many other attributes contributes to the richness of the environment for teaching and research. We also need diversity in discipline, intellectual outlook, cognitive style, and personality to offer students the breadth of ideas that constitute a dynamic intellectual community.

Yet diversity of faculty, staff, and students also brings challenges. Increasing diversity can lead to less cohesiveness, less effective communication, increased anxiety, and greater discomfort for many members of a community (Cox, 1993). To minimize the challenges and derive maximum benefits from diversity, we must be respectful of each other's cultural and stylistic differences and aware of unconscious assumptions and behaviors that may influence interactions. The goal is to create a climate in which all individuals feel "personally safe, listened to, valued, and treated fairly and with respect" (Definition of Campus Climate, UW Provost's Office, 2004).

A vast and growing body of research provides evidence that a diverse student body, faculty, and staff benefits our joint missions of teaching and research.

BENEFITS FOR TEACHING AND RESEARCH

Research shows that diverse working groups are more productive, creative, and innovative than homogeneous groups. This research suggests that developing a diverse faculty will enhance teaching and research (Milem, 2001). **Some findings are:**

- A controlled experimental study of performance in a brainstorming session compared the ideas generated by ethnically diverse groups composed of Asians, Blacks, Whites, and Latinos to those generated by ethnically homogenous groups composed of Whites only. Evaluators who were unaware of the source of the ideas found no significant difference in the number of ideas generated by the two types of groups, but, using measures of feasibility and effectiveness, rated the ideas generated by diverse groups as being of higher quality (Cox, 1993; McLeod, Lobel, & Cox, 1996).
- The level of critical analysis of decisions and alternatives was higher in groups subjected to minority viewpoints than in those that were not, regardless of whether or not the minority opinion was correct or ultimately prevailed. Minority viewpoints stimulated discussion of multiple perspectives and previously unconsidered alternatives (Nemeth, 1985; 1995).
- A study of innovation in corporations found that the most innovative companies deliberately established diverse work teams (Kanter, 1983).
- Using data from the 1995 Faculty Survey conducted by the Higher Education Research Institute (HERI) at UCLA, another study documented that scholars from minority groups have expanded and enriched scholarship and teaching in many intellectual disciplines by offering new perspectives, raising new questions, challenges, and concerns (Antonio, 2002. See also Turner, 2000; Nelson and Pellet, 1997).
- Several research studies found that women and faculty of color more frequently used active learning in the classroom, encouraged student input, and included perspectives of women and minorities in their coursework (Milem, 2001).

BENEFITS FOR STUDENTS:

Numerous research studies have examined the impact of diversity on students and educational outcomes. Cumulatively, these studies provide extensive evidence that diversity has a positive impact on all students, minority and majority (Smith et al., 1997). **Some examples are:**

- A national longitudinal study, conducted by the Higher Educational Research Institute at UCLA, involving 25,000 undergraduates attending 217 four-year colleges and universities in the late 1980s showed that institutional policies emphasizing diversity of the campus community, inclusion of themes relating to diversity in faculty research and teaching, and opportunities for students to confront racial and multicultural issues in the classroom and in extracurricular settings had uniformly positive effects on students' cognitive development, satisfaction with the college experience, and leadership abilities (Astin, 1993).
- An analysis of two longitudinal studies, one using data from the Cooperative Institutional Research Program (CIRP), a national survey conducted by the Higher Educational Research Institute on more than 11,000 students from 184 institutions in 1985 and 1989, and one on approximately 1500 students at the University of Michigan conducted in 1990 and 1994, showed that students who interacted with racially and ethnically diverse peers both informally and within the classroom showed the greatest "engagement in active thinking, growth in intellectual engagement and motivation, and growth in intellectual and academic skills" (Gurin, 1999; 2002).
- Another major study used data from the National Study of Student Learning (NSSL) to show that both in-class and out-of-class interactions and involvement with diverse peers fostered critical thinking. This study also showed a strong correlation between "the extent to which an institution's environment is perceived as racially nondiscriminatory" and students' willingness to accept both diversity and intellectual challenge (Pascarella, et al., 1996).
- Using the "Faculty Classroom Diversity Questionnaire," a comprehensive survey of faculty attitudes toward and experiences with ethnic and racial diversity on campus, researchers found that more than 69 percent of approximately 500 faculty respondents in a randomly selected sample of 1,210 faculty from Carnegie Classified Research I institutions believed that all students benefited from learning in racially and ethnically diverse environments; that such environments exposed students to new perspectives and encouraged them to examine their own perspectives. More than 40 percent of respondents believed diversity fostered interactions that helped develop critical thinking and leadership skills (Maruyama and Moreno, 2000). Another survey found that more than 90% of 55,000 faculty respondents believed that a racially and ethnically diverse campus enhanced students' educational experiences (Milem and Hakuta, 2000).
- A 1993-94 survey of 1,215 faculty in doctoral-granting departments of computer science, chemistry, electrical engineering, microbiology, and physics showed that women faculty play an important role in fostering the education and success of women graduate students (Fox, 2003).

CHALLENGES OF DIVERSITY

Despite the benefits that a diversified faculty, staff, and student body offer to a campus, diversity also presents considerable challenges that must be addressed and overcome. Some examples include:

- Numerous studies show that women and minority faculty members are considerably less satisfied with many aspects of their jobs than are majority male faculty members. These aspects include teaching and committee assignments, involvement in decision-making, professional relations with colleagues, promotion and tenure, and overall job satisfaction (Allen et al., 2002; Aguirre, 2000; Astin & Cress, 2003; Foster et al., 2000; Milem & Astin, 1993; MIT Committee on Women Faculty, 1999; Riger, 1997; Somers, 1998; Task Force on the Status of Women Faculty in the Natural Sciences and Engineering at Princeton, 2003; Trower & Chait, 2002; Turner, 2002; Turner & Myers, 2000; University of Michigan Faculty Work-Life Study Report, 1999; Study of Faculty Worklife at the University of Wisconsin - Madison).
- A recent study of minority faculty in universities and colleges in eight Midwestern states (members of the Midwestern Higher Education Commission) showed that faculty of color experience exclusion, isolation, alienation, and racism in predominantly white universities (Turner and Myers, 2000).
- Minority students often feel isolated and unwelcome in predominantly white institutions and many experience discrimination and differential treatment. Minority status can result from race, ethnicity, national origin, sexual orientation, disability and other factors (Amaury & Cabrera, 1996; Cress & Sax, 1998; Hurtado, 1999; Rankin, 1999; Smedley et al., 1993; Suarez-Balcazar et al., 2003).
- Women students, particularly when they are minorities in their classes, may experience "a chilly climate" – which can include sexist use of language; presentation of stereotypic and/or disparaging views of women; differential treatment from professors; and sexual harassment (Crombie et al., 2003; Foster 1994; Hall & Sandler, 1982, 1984; Sands, 1998; Swim et al., 2001; Van Roosmalen, 1998; Sandler & Hall, 1986; Whitt et al, 1999).
- Studies show that the lack of previous positive experiences with "outgroup members" (minorities) causes "ingroup members" (majority members) to feel anxious about interactions with minorities. This anxiety can cause majority members to respond with hostility or to simply avoid interactions with minorities (Plant & Devine, 2003).

Influence of Unconscious Assumptions and Biases

Research studies show that people who have strong egalitarian values and believe that they are not biased may nevertheless unconsciously or inadvertently behave in discriminatory ways (Dovidio, 2001). A first step towards improving climate is to recognize that unconscious biases, attitudes, and other influences not related to the qualifications, contributions, behaviors and personalities of our colleagues can influence our interactions, ***even if we are committed to egalitarian views***.

Although we all like to think that we are objective scholars who judge people based entirely on merit and on the quality of their work and the nature of their achievements, copious research shows that every one of us brings a lifetime of experience and cultural history that shapes our interactions with others.

The results from controlled research studies in which people were asked to make judgments about subjects demonstrate the potentially prejudicial nature of the many implicit or unconscious assumptions we can make. Examples range from physical and social expectations or assumptions to those that have a clear connection to the environments in which we work.

EXAMPLES OF COMMON SOCIAL ASSUMPTIONS/EXPECTIONS:

- When shown photographs of people of the same height, evaluators overestimated the heights of male subjects and underestimated the heights of female subjects, even though a reference point, such as a doorway, was provided (Biernat et al., 1991).
- When shown photographs of men with similar athletic abilities, evaluators rated the athletic ability of African American men higher than that of white men (Biernat et al., 1991).
- Students asked to choose counselors from among a group of applicants of marginal qualifications more often chose white candidates than African American candidates with identical qualifications (Dovidio & Gaertner, 2000).

These studies show how generalizations that may or may not be valid can be applied to the evaluation of individuals (Bielby & Baron, 1986). In the study on height, evaluators applied the statistically accurate generalization that men are usually taller than women to their estimates of the height of individuals who did not necessarily conform to the generalization. If we can inaccurately apply generalizations to characteristics as objective and easily measured as height, what happens when the qualities we are evaluating are not as objective or as easily measured? What happens when, as in the studies of athletic ability and choice of counselor, the generalization is not valid? What happens when such generalizations unconsciously influence the ways we interact with other people?

EXAMPLES OF ASSUMPTIONS OR BIASES THAT CAN INFLUENCE INTERACTIONS:

- When rating the quality of verbal skills as indicated by vocabulary definitions, evaluators rated the skills lower if they were told an African American provided the definitions than if they were told that a white person provided them (Biernat et al., 1991).
- When asked to assess the contribution of skill and luck to successful performance of a task, evaluators more frequently attributed success to skill for males and to luck for females, even though males and females performed the task identically (Deaux & Emswiller, 1974).
- Evaluators who were busy, distracted by other tasks, and under time pressure gave women lower ratings than men for the same written evaluation of job performance. Sex bias decreased when they gave all their time and attention to their judgments, which rarely occurs in actual work settings (Martell, 1991).
- Evidence suggests that perceived incongruities between the female gender role and leadership roles cause two types of disadvantage for women: (1) ideas about the female gender role cause women to be perceived as having less leadership ability than men and consequently diminish women's rise to leadership positions, and (2) women in leadership positions receive less favorable evaluations because they are perceived to be violating gender norms. These perceived incongruities lead to attitudes that are less positive toward female than male leaders (Eagly & Karau, 2002; Ridgeway, 2001).
- A study of nonverbal responses of white interviewers to black and white interviewees showed that white interviewers maintained higher levels of visual contact, reflecting greater attraction, intimacy, and respect, when talking with whites and higher rates of blinking, indicating greater negative arousal and tension, when talking with blacks (Dovidio et al., 1997).

EXAMPLES OF ASSUMPTIONS OR BIASES IN ACADEMIC CONTEXTS:

Several research studies have shown that biases and assumptions can affect evaluation and hiring of candidates for academic positions. These studies show that assessment of resumes and postdoctoral applications, evaluation of journal articles, and the language and structure of letters of recommendation are significantly influenced by the gender of the person being evaluated. As we attempt to enhance campus and department climate, we need to consider whether the influence of such biases and assumptions also affects selection of invited speakers, conference participants, interaction and collaboration with colleagues, and promotion to tenure and full professorships.

- A study of over 300 recommendation letters for medical faculty hired at a large American medical school in the 1990s found that letters for female applicants differed systematically from those for males (Trix & Psenka, 2002).
- In a national study, 238 academic psychologists (118 male, 120 female) evaluated a résumé randomly assigned a male or a female name. Both male and female participants gave the male applicant better evaluations for teaching, research, and service and were more likely to hire the male than the female applicant (Steinpreis et al., 1999).

- A study of postdoctoral fellowships awarded by the Medical Research Council in Sweden found that women candidates needed substantially more publications to achieve the same rating as men, unless they personally knew someone on the panel (Wenneras & Wold, 1997).
- In a replication of a 1968 study, researchers manipulated the name of the author of an academic article, assigning a name that was male, female, or neutral (initials). The 360 college students who evaluated this article were influenced by the name of the author. They evaluated the article more favorably when written by a male than when written by a female. Questions asked after the evaluation was complete showed that bias against women was stronger when evaluators believed that the author identified only by initials was female (Paludi & Bauer, 1983).

BIASES AND ASSUMPTIONS CAN INFLUENCE INTERACTION BETWEEN COLLEAGUES IN THE FOLLOWING WAYS:

- Women and minorities may be subject to higher expectations in areas such as number and quality of publications, name recognition, or personal acquaintance with a committee member.
- Colleagues from institutions other than the major research universities that have trained most of our faculty may be under-valued. Opportunities to benefit from the experiences and expertise of colleagues from other institutions, such as historically black universities, four-year colleges, government, or industry, who can offer innovative, diverse, and valuable perspectives on research, teaching, and the functioning of the department, may consequently be neglected.
- The work, ideas, and findings of women or minorities may be undervalued, or unfairly attributed to a research director or collaborators despite contrary evidence in publications or letters of reference.
- The ability of women or minorities to run a research group, raise funds, and supervise students and staff may be underestimated, and may influence committee and teaching assignments.
- Assumptions about possible family responsibilities and their effect on a colleague’s career path may negatively influence evaluation of merit, despite evidence of productivity and may affect committee and teaching assignments.
- Negative assumptions about whether female or minority colleagues "fit in" to the existing environment can influence interactions.

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Reviewing Applicants: Research on Bias and Assumptions

(Used in Workshops for Chairs of Hiring Committees)

We all like to think that we are objective scholars who judge people based entirely on their experience and achievements, but copious research shows that every one of us brings a lifetime of experience and cultural history that shapes the review process.

"To evaluate other people more accurately we need to challenge our implicit hypotheses . . . we need to become explicitly aware of them

The results from controlled studies in which people were asked to make judgments about subjects demonstrate the potentially prejudicial nature of the many implicit or unconscious assumptions we can make. Examples range from physical and social expectations or assumptions to those that have a clear connection to hiring, even for faculty positions.

It is important to note that in most of these studies, ***the gender of the evaluator was not significant, indicating that both men and women share and apply the same assumptions about gender.***

Recognizing biases and other influences not related to the quality of candidates can help reduce their impact on your search and review of candidates. Spending sufficient time on evaluation (15–20 minutes per application) can also reduce the influence of assumptions.

Examples of common social assumptions or expectations:

- When shown photographs of people of the same height, evaluators overestimated the heights of male subjects and underestimated the heights of female subjects, even though a reference point, such as a doorway, was provided (Biernat, et.al.).
- When shown photographs of men with similar athletic abilities, evaluators rated the athletic ability of African American men higher than that of white men (Biernat, et.al.).
- Students asked to choose counselors from among a group of applicants of marginal qualifications more often chose white candidates than African American candidates with identical qualifications (Dovidio and Gaertner).

These studies provide examples of "statistical discrimination" – the application of generalizations that may or may not be accurate to the evaluation of individuals (Bielby and Baron). In the study on height, evaluators applied the valid generalization that men are usually taller than women to their estimates of the height of individuals who did not necessarily conform to the generalization. If we can inaccurately apply generalizations to characteristics as objective and easily measured as height, what happens when the qualities we are evaluating are not as objective or as easily measured? What happens when the generalization is not accurate?

. . . as we become aware of our hypotheses, we replace our belief in a just world with a view of the world in which bias plays a role.

Examples of assumptions or biases that can influence the evaluation of applications:

- When rating the quality of verbal skills as indicated by vocabulary definitions, evaluators rated the skills lower if they were told an African American provided the definitions than if they were told that a white person provided them (Biernat, et.al.).
- When asked to assess the contribution of skill and luck to successful performance of a task, evaluators more frequently attributed success to skill for males and to luck for females, even though males and females performed the task identically (Deaux and Emswiller).

Since this a state of affairs we wish were otherwise, we prefer not to acknowledge it. But we can learn."

Virginia Valian

- Evaluators who were busy, distracted by other tasks, and under time pressure gave women lower ratings than men for the same written evaluation of job performance. Sex bias decreased when they gave all their time and attention to their judgments, which rarely occurs in actual work settings. This study indicates that evaluators are more likely to rely upon underlying assumptions and biases when they cannot or do not give sufficient time and attention to their evaluations (Martell).
- Evidence shows that perceived incongruities between the female gender role and leadership roles leads to attitudes that are less positive toward female than male leaders (Eagly and Karau; Ridgeway).

Examples of assumptions or biases in academic job-related contexts:

- A study of over 300 recommendation letters for medical faculty hired at a large American medical school in the 1990s found that letters for female applicants differed systematically from those for males. Letters written for women were shorter, provided "minimal assurance" rather than solid recommendation, raised more doubts, and portrayed women as students and teachers while portraying men as researchers and professionals (Trix and Psenka).
- In a national study, 238 academic psychologists (118 male, 120 female) evaluated a résumé randomly assigned a male or a female name. Both male and female participants gave the male applicant better evaluations for teaching, research, and service and were more likely to hire the male than the female applicant (Steinpreis, et.al.). Another study showed that preference for males was greater when women represented a small proportion of the pool of candidates, as is typical in many academic fields (Heilman).
- A study of postdoctoral fellowships awarded by the Medical Research Council in Sweden, found that women candidates needed substantially more publications to achieve the same rating as men, unless they personally knew someone on the panel (Wenneras and Wold).

When assumptions "that cultural, racial, ethnic, and gender biases are simply nonexistent [in] screening and evaluation processes, there is grave danger that minority and female candidates will be rejected."

C.V.S. Turner

Biases and assumptions can influence your search in the following ways:

- Women and minority candidates may be subject to different expectations in areas such as numbers of publications, name recognition, or personal acquaintance with a committee member. (*Recall the example of the Swedish Medical Research Council.*)
- Candidates from less prestigious institutions may be under-valued. (*Qualified candidates from such sources, e.g., candidates from historically black institutions, might offer more innovative and diverse perspectives than candidates with similar records who have always worked in prestigious institutions.*
- The work, ideas, and findings of women or minorities may be undervalued, or unfairly attributed to a research director or collaborators despite contrary evidence in publications or letters of reference. (*Recall the biases seen in evaluations of written descriptions of job performance, and the attribution of success to luck rather than skill.*)
- The ability of females or minorities to run a research group, raise funds, and supervise students and staff may be underestimated. (*Recall assumptions about leadership abilities.*)
- Assumptions about possible family responsibilities and their effect on the candidate's career path may negatively influence evaluation of a candidate's merit, despite evidence of productivity. *(Recall studies of statistical discrimination.)*
- Negative assumptions about whether female or minority candidates will "fit in" to the existing environment can influence evaluation. (*Recall students' choice of counselor.)*

Tips for Reviewing Applicants

- Learn about research on biases and assumptions.
- Discuss research on biases and assumptions and consciously strive to minimize their influence on your evaluation of candidates.
- Develop criteria for evaluating candidates and apply them consistently to all applicants.
- Spend sufficient time (15–20 minutes) evaluating each applicant.
- Evaluate each candidate's entire application; don't depend too heavily on only one element such as the letters of recommendation, or the prestige of the degree granting institution or post-doctoral program.
- Be able to defend every decision for rejecting or retaining a candidate.
- Periodically evaluate your decisions and consider whether qualified women and underrepresented minorities are included. If not, consider whether evaluation biases and assumptions are influencing your decisions.

Diversity of experience, age, physical ability, religion, ethnicity, race, and gender contributes to the richness of the environment for teaching and research.

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

http://wiseli.engr.wisc.edu

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REVIEWING APPLICANTS

Research on Bias and Assumptions

THE UNIVERSITY of WISCONSIN MADISON

Advancing Your Career Through Awards and Honors

How receiving an award benefits you:

- Increases your visibility in your field
- Expands your professional network
- Enhances your self-esteem
- Furthers your professional reputation
- Enhances your credibility
- Brings prominence to the department, the college, and the University
- Makes you eligible for other recognitions and leadership roles
- Brings about greater acceptance and recognition of you and your work in academia

Photo© Bob Rashid

How your award benefits all women:

- Increases women's visibility in their fields
- Celebrates the accomplishments of women
- Encourages women to go into the sciences and engineering in academia
- Breaks down cultural, attitudinal, and structural impediments that make it difficult for women to persevere
- Makes you a role model to other women
- Helps diversify the image of science

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.
Funding for this publication was provided by NSF #0123666.

Awards are not an endpoint! Winning an award opens doors to new opportunities:

- Aligning awards with your career goals advances your science
- Having experience applying for and/or receiving awards allows you to be a representative, a mentor, and a leader
- Winning an award for your work enhances the prestige of the entire University
- Receiving an award positions you for selection to national committees, named lectureships, policy sitting boards, etc.

Always be prepared to apply and be nominated for awards. Keep updated versions of the following:

- Your curriculum vitae
- A description of your current work
- A list of 4-5 people who will write letters for you (2 inside the University; 3 outside the University)
- A list of what awards matter to you in your career
- A strategic and deliberate plan

Now what?

- Contact department chairs, professional societies, general societies, and let them know of your interest
- Get to know people who have previously won the award in which you are interested
- Cultivate a national mentor
- Fill out an award application yourself
- Regularly scan the University's, departments', and societies' websites for awards and award deadlines

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

Advancing Your Career through Awards and Recognitions

A Guide for Women Faculty in the Sciences & Engineering

Push Yourself
Be a Nominee
Encourage a Colleague
Be a Nominator
This Year
Each Year

Sources of awards, recognitions, and special grants

Career Timeline

	Department; School; College	University (Examples at UW)	Professional Society	General Society (e.g., NAS, AAAS, IOM, etc.)	Special Grants and Recognitions
Graduate School and Post-doctoral	• Dissertator Awards • Fellowships	• WARF Fellowships	• Dissertation Awards • Pre-doctoral Training • Targeted Society Projects	• Scholarships	• NIH Trainee • Fellowships • NIH Fellowships Awards from NIH
Pre-tenure	• Teaching	• Vilas Research	• Best Paper Awards	• Young Researcher	• NSF CAREER Awards • NIH K Awards
Tenure	• Publication • Alumnae/Alumni	• Romnes Professorship	• Fellowships	• Lectureships	• Program Project Grants; ROIs • Chair Major Policy and Research Committees
Professor	• Named Professorships • Service • Research Contributions	• Kellett Professorship • Vilas • Hilldale	• Senior Fellows • Career Contributions	• Examples: AAAS, AAE, AAS, IOM, Sigma Xi • Honorary Memberships	• Direct Training Grants (NIH) • MERIT (NIH)

Timeless Awards: Teaching excellence awards; community and public service awards; book/publication awards; key committee memberships.

Study of Faculty Worklife at the University of Wisconsin-Madison: Preliminary Findings

Study of Faculty Worklife at the University of Wisconsin-Madison: Preliminary Findings

Response Rates & Demographics

- Over 60% response rate (N=1,340)
- Women higher response rates than men
- Male faculty in Business, Law Schools under-represented
- Male tenured faculty of color under-represented

Hiring Process

- Almost no gender differences in experience of or satisfaction with hiring process
- Untenured faculty are more "savvy" about hiring process than are tenured faculty who were hired as assistant professors; that is, they negotiate more, have mentors and get advice more often, and are less naïve
- "Prestige of UW-Madison" is most commonly-selected reason for accepting position here

Time Allocation

- Faculty spend most of their time (61%) on research and teaching. Men faculty, faculty in Biological and Physical science departments, and majority faculty spend more of their time on research than on teaching, while the opposite is true for women faculty, faculty in Social Studies and Humanities departments, and faculty of color
- Most faculty (67%) would prefer to spend a larger percentage of their time on research activities; almost half (43%) of faculty would prefer to spend less time teaching
- Untenured faculty spend relatively little of their time on outreach activities, and most (52%) would like to increase this amount
- Faculty with administrative duties would prefer to cut the time spent on these tasks in half

Resources

- Very few significant gender or racial/ethnic differences in satisfaction with equipment and space
- Faculty in Humanities departments are less-satisfied with equipment and space than others
- Women faculty are more satisfied with access to internal funding than are men faculty
- Women faculty are less likely than men to agree that they have sufficient technical/computer, office, teaching, and clinical support

Climate

- Strong majority (around 90%) of all faculty feel respected by colleagues, students, staff, and dept. chairs
- Significant gender differences appear in most climate indicators; faculty of color also are less-pleased than majority faculty on many indicators, although few statistical differences
- Department chairs experience departmental climate very differently than other faculty in their departments
- Faculty in Physical science departments are the most pleased with their departmental climate; faculty in Humanities departments are less-pleased

Satisfaction

- Strong majority (around 90%) of all faculty are satisfied with their job; even more are satisfied with their careers at UW-Madison
- Women faculty are significantly less-satisfied than male faculty, but are not more likely to say they have considered leaving the UW
- Faculty in Humanities departments are significantly less-satisfied than faculty in other departments, and they are more likely than other faculty to say they have considered leaving the UW
- Most commonly-cited reason for faculty members' satisfaction with the UW-Madison is "colleagues"

Sexual Harassment

In the past 5 years:

- Almost 16% of women faculty have experienced at least one incident of sexual harassment
- Around 25% of women in Humanities departments have experienced sexual harassment
- Around 25% of gay/lesbian faculty have experienced sexual harassment

Balancing Work/Life

- Women faculty, untenured faculty, and gay/lesbian faculty are significantly less-satisfied with their work/life balance than other faculty, and are significantly more likely to say they have considered leaving UW due to work/life balance issues
- Faculty in Biological and Physical science departments say they are more satisfied with their work/life balance than other faculty, yet report having fewer family-friendly policies in their departments

Childcare

- Most faculty with children under age 18 are satisfied with their childcare arrangements (around 90%), but faculty with in-home childcare (e.g., nanny), and those whose school-aged children care for themselves after school are much less satisfied
- Faculty who use University childcare report being "Very Satisfied" more often than others
- For most dissatisfied parents, "availability of infant/toddler care" is the biggest priority
- Faculty in Biological science departments have more children than other faculty members

Care for Aging Parents

- 18.5% of faculty have responsibilities for care of an aging parent
    - More women than men care for an aging parent
    - More tenured faculty than untenured faculty care for an aging parent
- For those who care for aging parents, a mean of 7 hours per week is spent on the care
    - More hours for women than for men
    - More hours for untenured faculty than for tenured faculty
- 5.9% of faculty care for both aging parents and a child under age 18 at the same time

Spouse/Partner

- Around 1/3 of faculty who have a spouse or partner have considered leaving UW due to their partner's job (or both their job and their partner's combined)
- Women and untenured faculty especially report they have seriously considered leaving due to concerns about their spouse/partner's employment
- Almost one-half of women faculty report having a spouse/partner who works at the UW-Madison
- Faculty in Biological and Physical science departments are more likely to have a spouse or partner than are faculty in other departments. They are also more likely to have a spouse who is not in the labor force at all, and less likely to have a spouse in the labor force full-time

Health

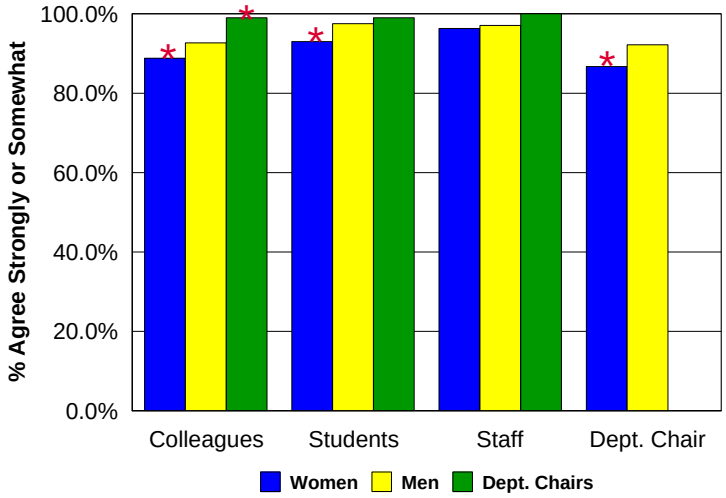
- The best health outcomes are enjoyed by majority men. In contrast, women faculty, untenured faculty, and faculty of color:
    - Rate their general health lower
    - Report being happy, well-rested, and physically fit less often
    - Report being fatigued, stressed, nervous, depressed, short-tempered more often
- Higher reports of significant health problems or disabilities were reported by tenured faculty than untenured

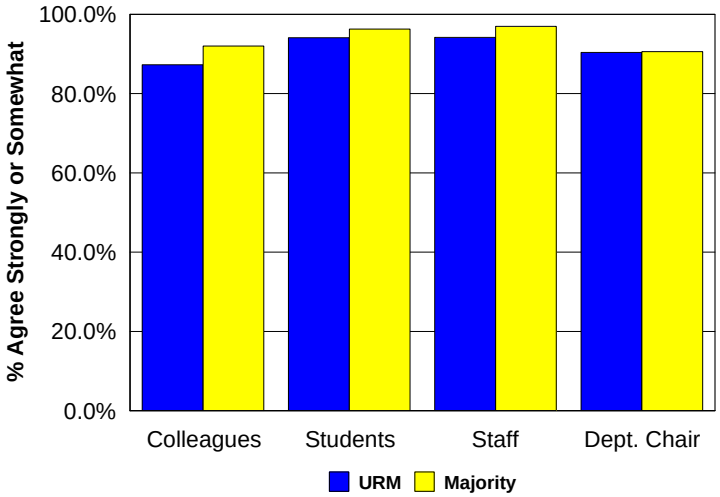
Diversity Issues

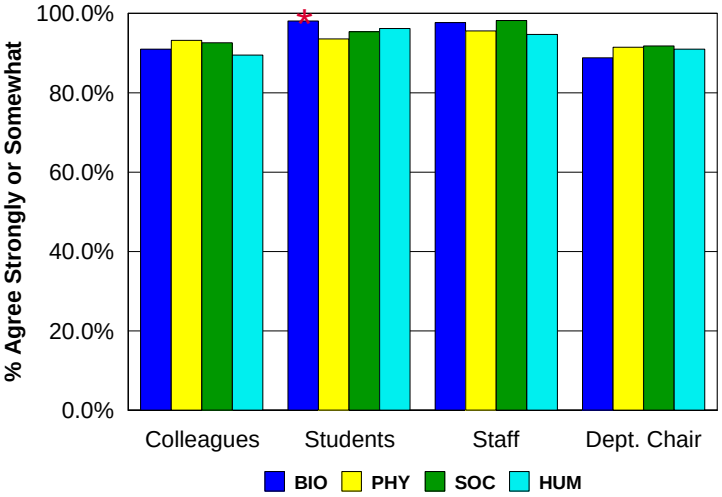
- More faculty say their departments are actively recruiting, enhancing climate for, and promoting leadership of women and minorities than say their departments have identified ways to do so
- Women faculty are significantly less likely to agree that their departments are identifying and taking steps to increase diversity in recruitment, climate, and leadership of their departments (diversity includes both gender and racial/ethnic diversity)

Treated With Respect in the Workplace

Colleagues: "I am treated with respect by colleagues"
Students: "I am treated with respect by students"
Staff: "I am treated with respect by staff"
Dept. Chair: "I am treated with respect by my department chair"



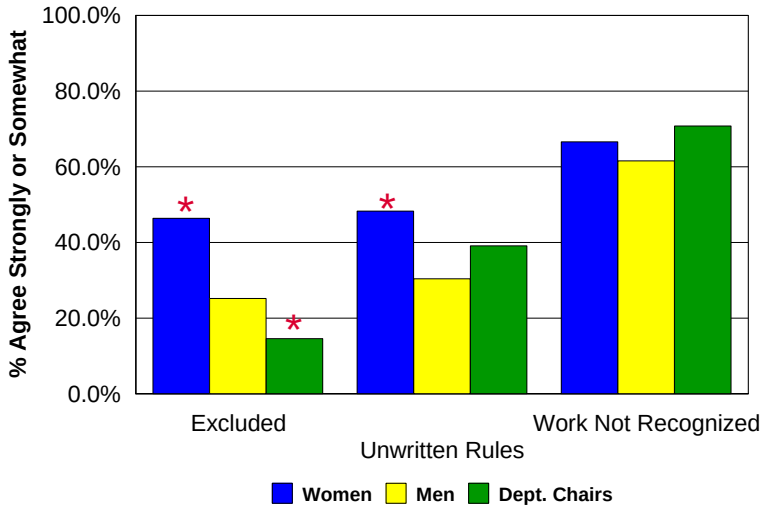


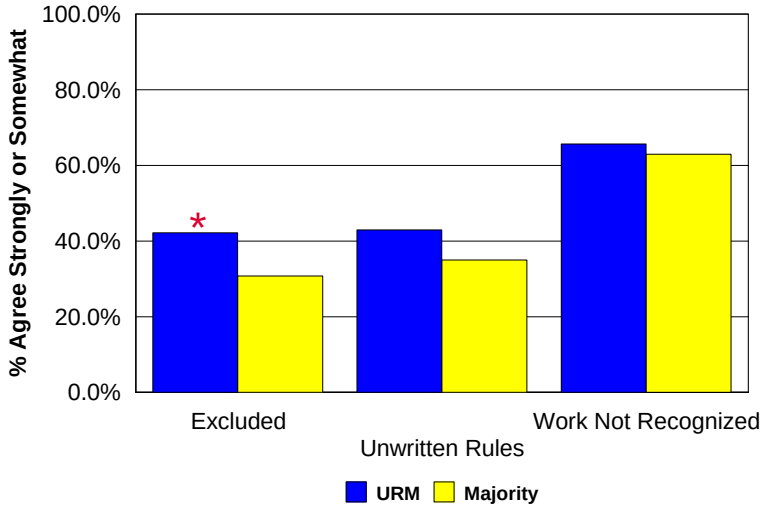


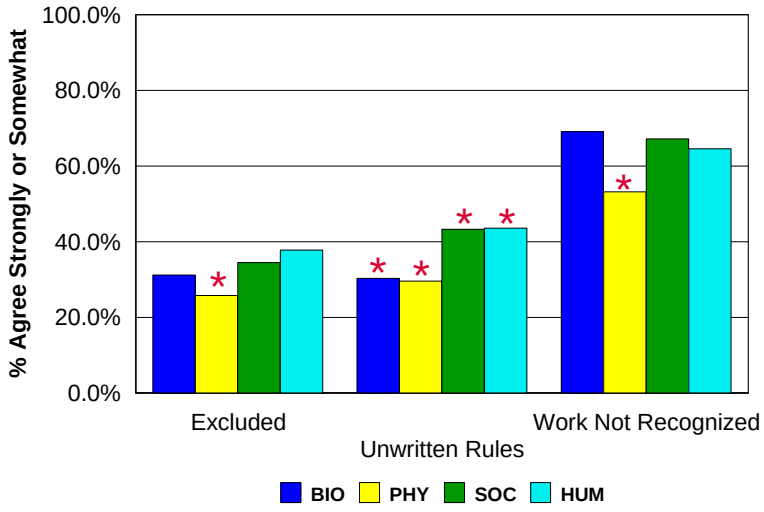
NOTES: * indicates significant t-test at $p<.05$.

Informal Departmental Interactions

Excluded: "I feel excluded from an informal network in my department"
Unwritten Rules: "I encounter unwritten rules concerning how one is expected to interact with colleagues"
Work Not Recognized: "I do a great deal of work that is not formally recognized by my department"



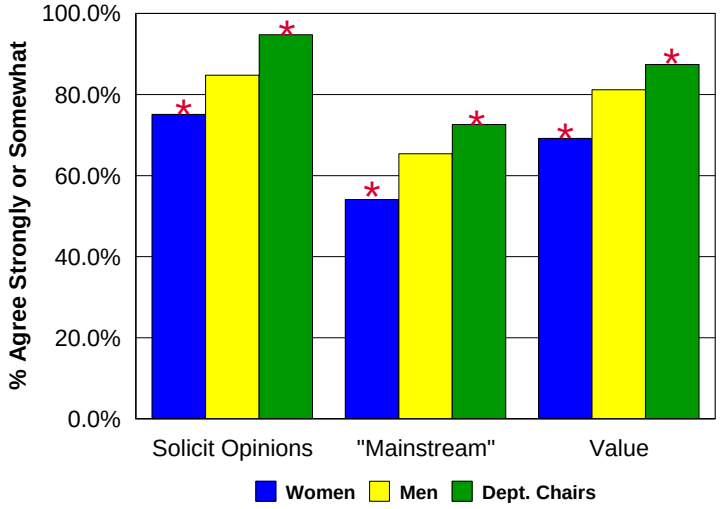


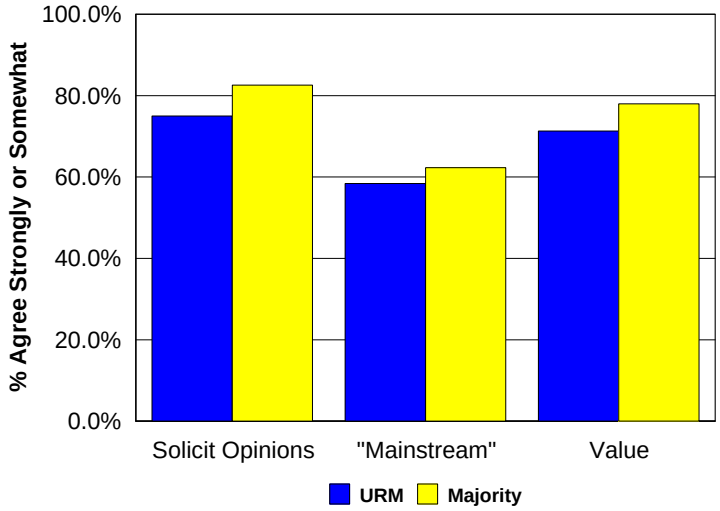


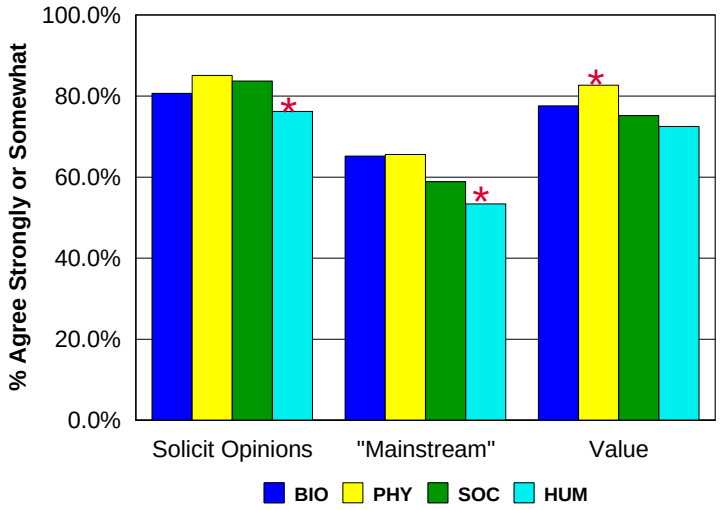
NOTES: * indicates significant t-test at $p<.05$.

Colleagues' Valuation of Research

Solicit Opinions: "Colleagues in my department solicit my opinion about work-related matters (such as teaching, research, and service)"
"Mainstream": "In my department, I feel that my research is considered mainstream"
Value: "I feel that my colleagues value my research"



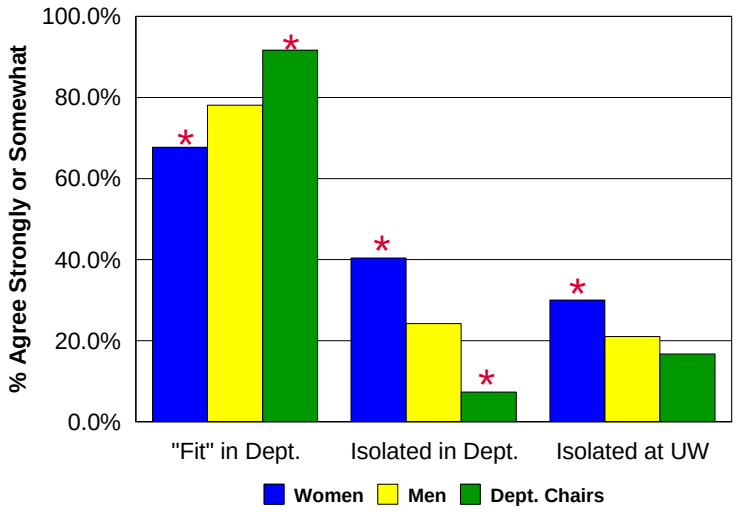


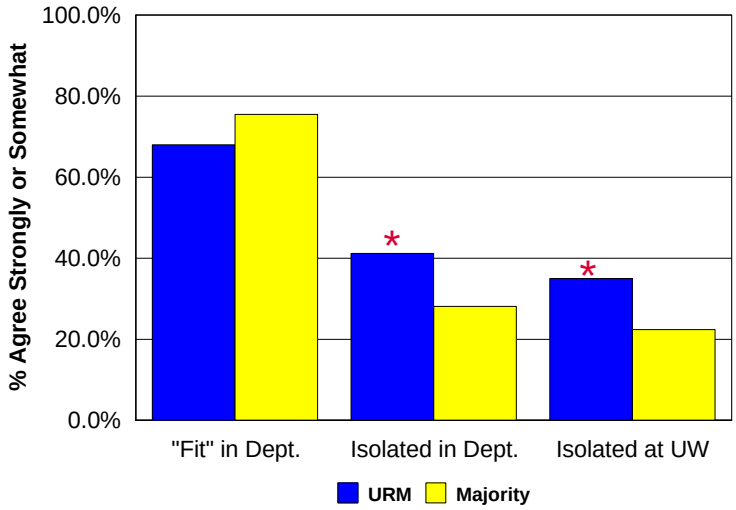


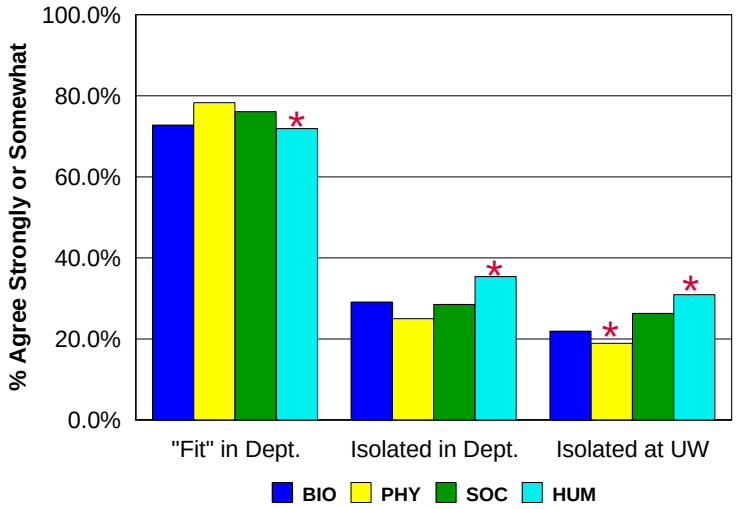
NOTES: * indicates significant t-test at $p<.05$.

Isolation and "Fit"

"Fit" in Dept.: "I feel like I "fit" in my department"
Isolated in Dept.: "I feel isolated in my department"
Isolated at UW: "I feel isolated on the UW campus overall"



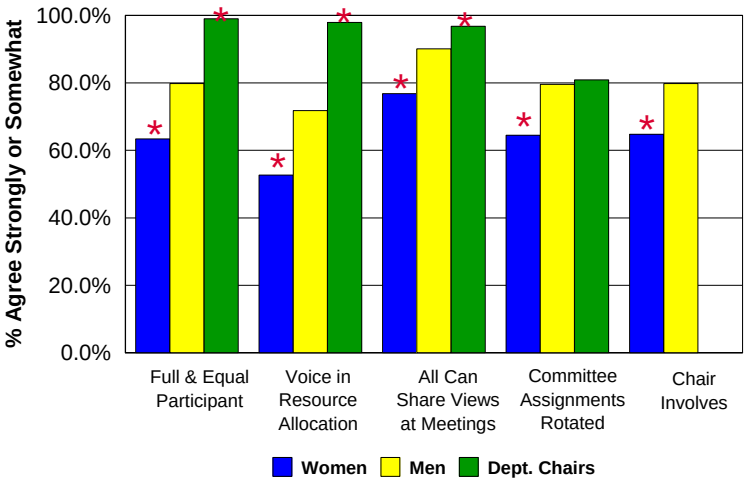


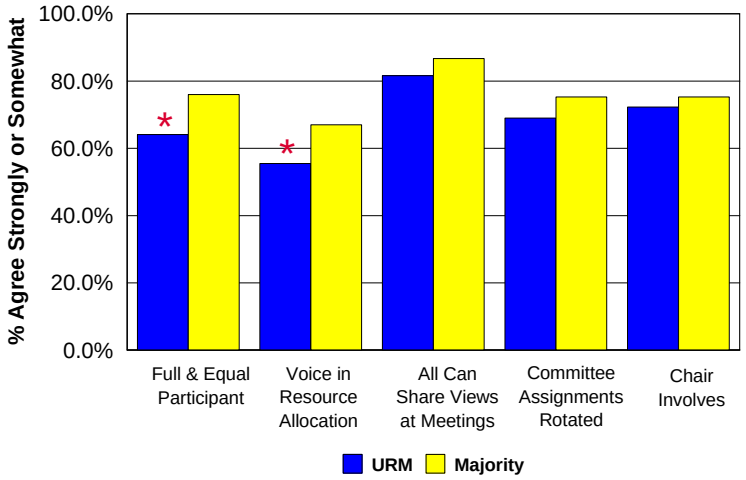


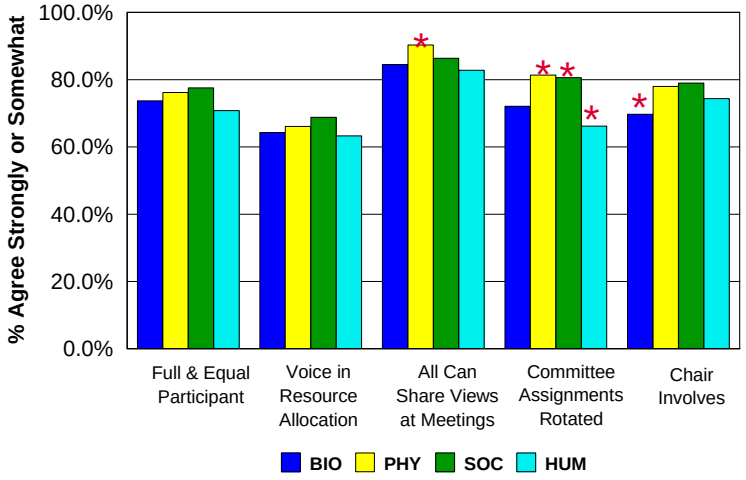
NOTES: * indicates significant t-test at $p<.05$.

Departmental Decision-Making

Full & Equal Participant: "I feel like a full and equal participant in the problem-solving and decision-making"
Voice in Resource Allocation: "I have a voice in how resources are allocated"
All Can Share Views at Meetings: "Meetings allow for all participants to share their views"
Committee Assignments Rotated: "Committee assignments are rotated fairly to allow for participation of all faculty"
Chair Involves: "My department chair involves me in decision-making"







NOTES: * indicates significant t-test at $p<.05$.

2003 Financial Report

	2002	2003	Total
Income			
NSF	$750,000	$750,000	$1,500,000
Celebrating Grants	$8,000	$14,400	$22,400
College of Engineering	$10,000	$20,000	$30,000
Salaries and Fringes			
Directors	$145,180	$115,306	$260,486
WISELI Staff	$98,419	$128,547	$226,966
Leadership Team	$69,725	$143,700	$213,425
Evaluators	$88,261	$72,110	$160,371
Travel	$9,758	$9,637	$19,395
Supplies and Equipment	$17,972	$12,348	$30,320
Initiatives			
Celebrating Grants	$249	$9,037	$9,286
Life Cycle Research Grants	$0	$57,648	$57,648
Video	$12,169	$5,160	$17,329
Survey	$0	$33,381	$33,381
Book Giveaways	$1,756	$395	$2,151
WISELI Seminar	$273	$537	$810
Senior Women Development	$172	$114	$286
Workshops	$2,015	$1,085	$3,100
Chairs' Climate Workshops	$0	$174	$174
Search Committee Chairs' Workshops	$0	$382	$382
Overhead	$198,942	$251,851	$450,793
Total Income	$768,000	$784,400	$1,552,400
Total Expenditures	$644,891	$841,412	$1,486,303

2004 Proposed Budget

	2002-03 Total	2004 Proposed	Total
Income			
NSF	$1,500,000	$750,000	$2,250,000
Celebrating Grants	$22,400	$10,000	$32,400
College of Engineering	$30,000	$10,000	$40,000
Salaries and Fringes			
Directors	$260,486	$120,600	$381,086
WISELI Staff	$226,966	$154,000	$380,966
Leadership Team	$213,425	$74,760	$288,185
Evaluators	$160,371	$79,978	$240,349
Travel**	$19,395	$17,500	$36,895
Supplies and Equipment	$30,320	$15,000	$45,320
Initiatives			
Celebrating Grants	$9,286	$10,000	$19,286
Life Cycle Research Grants	$57,648	$42,000	$99,648
Video	$17,329	$15,000	$32,329
Survey	$33,381	$0	$33,381
Book Giveaways	$2,151	$400	$2,551
WISELI Seminar	$810	$500	$1,310
Senior Women Development	$286	$500	$786
Workshops	$3,100	$1,000	$4,100
Chairs' Climate Workshops	$174	$500	$674
Search Committee Chairs' Workshops	$382	$500	$882
Overhead	$450,793	$237,618	$688,411
Total Income	$1,552,400	$770,000	$2,322,400
Total Expenditures	$1,486,303	$769,856	$2,256,160 *

*Unobligated funds to be used for Survey administered in Year 5.

** Increase in travel funds for Year 3 due to Georgia Tech ADVANCE Conference, PLUS our External Advisory meeting in June 2004.

Cost Sharing Summary (January 1 - December 31, 2002)
WISELI
Project dates: January 1, 2002 - December 31, 2002

	Cost Sharing thru 6/02	Cost Sharing thru 12/02	Total Obligation
Salaries & Fringe Benefits[1]	$ 19,535	$ 35,215	$ 45,215
Graduate Student support[2]	$ -	$ 15,550	$ 15,550
Symposium support[3]	$ -	$ -	$ 10,000
WISE Program support[4]	$ 1,097	$ 12,023	$ 28,250
Other Program support[5]	$ -	$ 8,439	$ 5,000
Indirect Costs	$ 9,388	$ 31,145	$ 46,064
Total Costs	$ 30,020	$ 102,372	$ 150,079

I certify that the cost sharing for this project is complete and accurate through December 31, 2002 and that we will meet our total cost sharing obligation of $150,000 for Year 1.

Diane Barrett

Diane Barrett, Assistant Director, Pre-Award Services
Research & Sponsored Programs

1 - Includes faculty and staff salaries and fringe benefits for the year beginning 1-1-02 through 12-31-02.
2 - Graduate student support is for: 1 Research Assistant at 50% beginning 7/1/02 through 6-30-03; 1 Project Assistant at 33% beginning 9/1/02 through 1/30/03.
3 - Funds for Celebrating Women in Science & Engineering Grant program.
4 - Includes program support and undergraduate support for the Women in Science and Engineering Undergraduate program.
5 - Includes funds for documentary video project, and survey of faculty and staff.

Cost Sharing Summary (January 1 - July 31, 2003)
WISELI
Project dates: January 1, 2003 - December 31, 2003

	Cost Sharing Year 1 Total	Cost Sharing 1/03 thru 6/03	Amount Obligated 7/03 thru 12/03	Total Obligation
Salaries & Fringe Benefits[1]	$ 35,215	$ 10,000	$ 26,000	$ 71,215
Graduate Student support[2]	$ 15,550	$ 12,274	$ 14,000	$ 41,824
Symposium support[3]	$ -	$ 6,045	$ 6,000	$ 12,045
WISE Program support[4]	$ 12,023	$ 9,989	$ 10,000	$ 32,012
Other Program support[5]	$ 8,439	$ 43,238	$ -	$ 51,677
Indirect Costs	$ 31,145	$ 36,106	$ 24,206	$ 91,457
Total Costs	$ 102,372	$ 117,652	$ 80,206	$ 300,230

I certify that the cost sharing for this project is complete and accurate through June 30, 2003 and that we will meet our total cost sharing obligation of $300,000 for Year 2.

Diane Barrett

Diane Barrett, Assistant Director, Pre-Award Services
Research & Sponsored Programs

1 - Includes faculty and staff salaries and fringe benefits for the year beginning 1-1-03 through 6-30-03.
2 - Graduate student support is for: 1 Research Assistant at 50% beginning 7/1/03 through 6-30-04; 1 Project Assistant at 33% beginning 9/1/02 through 1/30/03; 1 Project Assistant at 50% beginning 9/1/03 through 6/1/04.
3 - Funds for Celebrating Women in Science & Engineering Grant program.
4 - Includes program support and undergraduate support for the Women in Science and Engineering Undergraduate program
5 - Includes funds for documentary video project, survey of faculty and staff, and the Life Cycle Research Grant Program.

Cost Sharing Summary (January 1 - December 31, 2003)
Non-Certified Summary
WISELI

	Cost Sharing Year 1 Total*	Cost Sharing Year 2 Total**	Total Cost Sharing 1/02 - 12/03	*Amount Obligated 1/04 thru 12/04*
Salaries & Fringe Benefits[1]	$ 35,215	$ 16,956	$ 52,171	*$ 30,716*
Graduate Student support[2]	$ 15,550	$ 23,195	$ 38,745	*$ 26,968*
Symposium support[3]	$ -	$ 10,789	$ 10,789	*$ 10,500*
WISE Program support[4]	$ 12,023	$ 9,989	$ 22,012	*$ 14,562*
Other Program support[5]	$ 8,439	$ 74,898	$ 83,337	*$ 23,104*
Indirect Costs	$ 31,145	$ 61,801	$ 92,946	*$ 48,162*
Total Costs	$ 102,372	$ 197,628	$ 300,000	*$ 154,012*

* Year 1 Certified.
** Year 2 Estimates in process of certification; amounts may change slightly due to salary adjustments in 2003.

1 - Includes faculty and staff salaries and fringe benefits for the year beginning 1-1-03 through 12-31-03.
2 - Graduate student support is for: 1 Research Assistant at 50% beginning 7/1/03 through 6-30-04; 1 Project Assistant at 33% beginning 9/1/02 through 1/30/03; 1 Project Assistant at 50% beginning 10/1/03 through 6/1/04.
3 - Funds for Celebrating Women in Science & Engineering Grant program.
4 - Includes program support and undergraduate support for the Women in Science and Engineering Undergraduate program
5 - Includes funds for documentary video project, survey of faculty and staff, the Life Cycle Research Grant Program, and Miscellaneous support from the College of Engineering ($10,000/year).

Institutional Data, 2003

Table 1. Number and Percent of Women Faculty in Science/Engineering by Department, 2003

Division/Department	Women	Men	% Women
Physical Sciences	**47.50**	**410.05**	**10.4%**
Biological Systems Engineering	1.00	13.25	7.0%
Soil Science	3.50	18.00	16.3%
Chemical & Biological Engineering	1.00	16.00	5.9%
Civil & Environmental Engineering	2.00	26.00	7.1%
Electrical & Computer Engineering	2.00	39.25	4.8%
Biomedical Engineering	2.00	5.10	28.2%
Industrial Engineering	5.25	12.00	30.4%
Mechanical Engineering	3.00	28.75	9.4%
Materials Science & Engineering	2.00	14.00	12.5%
Engineering Physics	1.50	19.50	7.1%
Engineering Professional Development	0.00	7.00	0.0%
Astronomy	2.75	12.00	18.6%
Chemistry	3.50	37.00	8.6%
Computer Sciences	4.00	27.00	12.9%
Geology & Geophysics	4.00	14.50	21.6%
Mathematics	3.25	47.25	6.4%
Atmospheric & Oceanic Sciences	0.00	14.00	0.0%
Physics	4.25	45.75	8.5%
Statistics	2.50	13.70	15.4%
Biological Sciences	**165.51**	**598.19**	**21.7%**
Agronomy	1.00	17.00	5.6%
Animal Science	0.00	18.60	0.0%
Bacteriology	4.00	13.00	23.5%
Biochemistry	8.50	25.00	25.4%
Dairy Science	2.00	12.40	13.9%
Entomology	3.00	12.00	20.0%
Food Microbiology & Toxicology	1.00	4.00	20.0%
Food Science	2.00	13.00	13.3%
Genetics	0.50	12.00	4.0%
Horticulture	4.00	11.25	26.2%
Nutritional Sciences	5.00	3.50	58.8%
Plant Pathology	6.00	10.00	37.5%
Forest Ecology & Management	0.50	15.13	3.2%
Natural Resources - Wildlife Ecology	1.00	4.00	20.0%
Kinesiology	8.00	8.00	50.0%
Nelson Institute for Environmental Studies	1.50	4.07	26.9%
Botany	5.00	11.50	30.3%
Communicative Disorders	8.00	6.00	57.1%
Zoology	8.00	17.00	32.0%
Anatomy	5.00	15.50	24.4%
Anesthesiology	0.00	4.00	0.0%
Biostatistics & Medical Informatics	2.25	7.25	23.7%
Family Medicine	1.00	5.75	14.8%

Genetics	1.50	4.99	23.1%
Obstetrics & Gynecology	1.00	7.00	12.5%
Medical History & Bioethics	1.50	5.90	20.3%
Human Oncology	1.00	8.05	11.0%
Medicine	9.75	54.89	15.1%
Dermatology	0.00	4.00	0.0%
Medical Microbiology	3.20	7.50	29.9%
Medical Physics	1.00	12.55	7.4%
Neurology	1.00	8.50	10.5%
Neurological Surgery	1.00	5.00	16.7%
Oncology	3.75	11.90	24.0%
Ophthalmology & Visual Sciences	3.60	11.00	24.7%
Orthopedics & Rehabilitation	1.00	11.50	8.0%
Pathology & Laboratory Medicine	5.00	13.51	27.0%
Pediatrics	9.75	13.20	42.5%
Pharmacology	2.00	9.00	18.2%
Biomolecular Chemistry	2.80	8.00	25.9%
Physiology	6.00	17.00	26.1%
Population Health Sciences	9.20	13.60	40.4%
Psychiatry	7.21	9.70	42.6%
Radiology	0.50	13.45	3.6%
Surgery	0.00	27.00	0.0%
School of Pharmacy	6.50	25.00	20.6%
Animal Health & Biomedical Sciences	1.00	6.00	14.3%
Medical Sciences	3.00	11.00	21.4%
Pathobiological Sciences	1.00	12.00	7.7%
Comparative Biosciences	4.00	10.00	28.6%
Surgical Sciences	1.00	7.00	12.5%
Social Studies	**211.70**	**388.38**	**35.3%**
Agricultural & Applied Economics	1.00	20.40	4.7%
Life Sciences Communication	4.80	5.33	47.4%
Rural Sociology	3.00	10.00	23.1%
Natural Resources-Landscape Architecture	4.00	3.00	57.1%
Urban & Regional Planning	0.00	4.00	0.0%
School of Business	16.75	64.75	20.6%
Counseling Psychology	4.00	4.00	50.0%
Curriculum & Instruction	12.75	17.55	42.1%
Educational Administration	3.00	9.67	23.7%
Educational Policy Studies	4.00	7.00	36.4%
Educational Psychology	4.00	10.50	27.6%
Rehabilitation Psychology & Special Education	4.00	5.00	44.4%
School of Human Ecology	24.20	14.00	63.4%
Law School	12.50	29.25	29.9%
Anthropology	6.50	13.00	33.3%
Afro-American Studies	5.00	6.25	44.4%
Communication Arts	11.00	15.00	42.3%
Economics	4.20	23.50	15.2%
Ethnic Studies	1.00	0.00	100.0%
Geography	3.00	14.00	17.6%
LaFollette School of Public Affairs	2.50	6.25	28.6%

	School of Journalism & Mass Communication	4.00	8.50	32.0%
	School of Library & Information Studies	6.00	1.50	80.0%
	Political Science	7.00	29.75	19.0%
	Psychology	13.00	23.00	36.1%
	Social Work	9.50	5.00	65.5%
	Sociology	14.50	29.92	32.6%
	Urban & Regional Planning	2.00	4.75	29.6%
	School of Nursing	21.50	0.00	100.0%
	Professional Development & Applied Studies	3.00	3.51	46.1%
Humanities		**155.75**	**233.53**	**40.0%**
	Art	12.00	18.00	40.0%
	Dance	2.00	3.00	40.0%
	African Languages & Literature	4.00	3.50	53.3%
	Art History	8.00	4.75	62.7%
	Classics	6.00	3.50	63.2%
	Comparative Literature	1.00	5.00	16.7%
	East Asian Languages & Literature	5.00	5.00	50.0%
	English	26.70	26.50	50.2%
	French & Italian	9.00	14.25	38.7%
	German	6.00	11.60	34.1%
	Hebrew & Semitic Studies	3.00	3.00	50.0%
	History	15.50	34.50	31.0%
	History of Science	2.00	5.50	26.7%
	Linguistics	4.00	4.00	50.0%
	School of Music	13.00	31.10	29.5%
	Philosophy	4.00	19.00	17.4%
	Scandinavian Studies	3.00	3.00	50.0%
	Slavic Languages	3.00	8.00	27.3%
	Languages & Cultures of Asia	4.50	7.33	38.0%
	Spanish & Portuguese	9.00	12.00	42.9%
	Theatre & Drama	7.75	7.00	52.5%
	Women's Studies Program	2.50	1.00	71.4%
	Liberal Studies & the Arts	4.80	3.00	61.5%

SOURCE: October 2003 IADS Frozen slice

NOTE:

Faculty are assigned to division (Physical, Biological, Social Science) based on tenure home departments. An individual who is tenured in more than one department is shown based on the tenure split. E.g., a person who is 50% statistics and 50% plant pathology is shown as .5 FTE in Physical Sciences in this analysis. Faculty who have zero-dollar appointments and faculty who are paid wholly through an administrative appointment (such as dean or chancellor) are included in the FTE count.

Prepared by : Mei-Hsia Chen, Office of Academic Planning and Analysis

January, 2004

Table 2. Number and Percent of Women Faculty in Science/Engineering by Rank and Department, 2003

Division/Department	Women			Men			% Women		
	Full	Associate	Assistant	Full	Associate	Assistant	Full	Associate	Assistant
Physical Sciences	**23.00**	**6.00**	**18.50**	**280.45**	**59.00**	**70.60**	**7.6%**	**9.2%**	**20.8%**
Biological Systems Engineering	1.00	0.00	0.00	11.25	1.00	1.00	8.2%	0.0%	0.0%
Soil Science	0.00	1.00	2.50	15.00	1.00	2.00	0.0%	50.0%	55.6%
Chemical & Biological Engineering	1.00	0.00	0.00	6.00	6.00	4.00	14.3%	0.0%	0.0%
Civil & Environmental Engineering	1.00	0.00	1.00	16.00	7.00	3.00	5.9%	0.0%	25.0%
Electrical & Computer Engineering	1.00	0.00	1.00	21.25	10.00	8.00	4.5%	0.0%	11.1%
Biomedical Engineering	0.00	0.00	2.00	2.00	1.50	1.60	0.0%	0.0%	55.6%
Industrial Engineering	2.25	2.00	1.00	7.00	2.00	3.00	24.3%	50.0%	25.0%
Mechanical Engineering	1.00	1.00	1.00	18.00	1.75	9.00	5.3%	36.4%	10.0%
Materials Science & Engineering	1.00	0.00	1.00	10.00	2.00	2.00	9.1%	0.0%	33.3%
Engineering Physics	0.50	0.00	1.00	11.25	3.25	5.00	4.3%	0.0%	16.7%
Engineering Professional Development	0.00	0.00	0.00	2.00	3.00	2.00	0.0%	0.0%	0.0%
Astronomy	1.75	0.00	1.00	9.00	2.00	1.00	16.3%	0.0%	50.0%
Chemistry	1.50	0.00	2.00	31.00	0.00	6.00	4.6%	N/A	25.0%
Computer Sciences	2.00	1.00	1.00	21.00	0.00	6.00	8.7%	100.0%	14.3%
Geology & Geophysics	3.00	0.00	1.00	9.50	3.00	2.00	24.0%	0.0%	33.3%
Mathematics	1.75	1.00	0.50	37.00	7.25	3.00	4.5%	12.1%	14.3%
Atmospheric & Oceanic Sciences	0.00	0.00	0.00	7.00	3.00	4.00	0.0%	0.0%	0.0%
Physics	4.25	0.00	0.00	35.00	3.75	7.00	10.8%	0.0%	0.0%
Statistics	1.00	0.00	1.50	11.20	1.50	1.00	8.2%	0.0%	60.0%
Biological Sciences	**61.31**	**36.95**	**67.25**	**383.39**	**107.65**	**107.15**	**13.8%**	**25.6%**	**38.6%**
Agronomy	0.00	1.00	0.00	14.00	0.00	3.00	0.0%	100.0%	0.0%
Animal Science	0.00	0.00	0.00	14.60	1.00	3.00	0.0%	0.0%	0.0%
Bacteriology	1.00	1.00	2.00	10.00	2.00	1.00	9.1%	33.3%	66.7%
Biochemistry	6.00	0.00	2.50	22.00	1.00	2.00	21.4%	0.0%	55.6%
Dairy Science	1.00	1.00	0.00	6.40	2.00	4.00	13.5%	33.3%	0.0%
Entomology	1.00	0.00	2.00	9.00	0.00	3.00	10.0%	N/A	40.0%
Food Microbiology & Toxicology	1.00	0.00	0.00	3.00	0.00	1.00	25.0%	N/A	0.0%
Food Science	0.00	0.00	2.00	11.00	0.00	2.00	0.0%	N/A	50.0%
Genetics	0.00	0.50	0.00	11.00	0.50	0.50	0.0%	50.0%	0.0%
Horticulture	1.00	0.00	3.00	6.50	2.00	2.75	13.3%	0.0%	52.2%
Nutritional Sciences	2.00	1.00	2.00	1.50	1.00	1.00	57.1%	50.0%	66.7%
Plant Pathology	3.00	2.00	1.00	8.00	1.00	1.00	27.3%	66.7%	50.0%
Forest Ecology & Management	0.50	0.00	0.00	11.13	1.00	3.00	4.3%	0.0%	0.0%
Natural Resources - Wildlife Ecology	0.00	1.00	0.00	3.00	1.00	0.00	0.0%	50.0%	N/A
Kinesiology	1.00	2.00	5.00	4.00	3.00	1.00	20.0%	40.0%	83.3%
Nelson Institute for Environmental Studies	0.00	0.50	1.00	4.07	0.00	0.00	0.0%	100.0%	100.0%
Botany	3.00	0.00	2.00	9.00	1.00	1.50	25.0%	0.0%	57.1%

Communicative Disorders	3.00	1.00	4.00	5.00	1.00	0.00	37.5%	50.0%	100.0%
Zoology	2.00	0.00	6.00	12.00	2.00	3.00	14.3%	0.0%	66.7%
Anatomy	2.00	2.00	1.00	9.50	3.00	3.00	17.4%	40.0%	25.0%
Anesthesiology	0.00	0.00	0.00	1.00	1.00	2.00	0.0%	0.0%	0.0%
Biostatistics & Medical Informatics	0.00	1.25	1.00	3.25	1.50	2.50	0.0%	45.5%	28.6%
Family Medicine	1.00	0.00	0.00	3.10	1.65	1.00	24.4%	0.0%	0.0%
Genetics	0.00	0.50	1.00	2.99	0.50	1.50	0.0%	50.0%	40.0%
Obstetrics & Gynecology	0.00	1.00	0.00	6.00	0.00	1.00	0.0%	100.0%	0.0%
Medical History & Bioethics	1.00	0.00	0.50	2.90	1.00	2.00	25.6%	0.0%	20.0%
Human Oncology	0.00	1.00	0.00	4.05	3.00	1.00	0.0%	25.0%	0.0%
Medicine	4.00	0.00	5.75	24.14	18.75	12.00	14.2%	0.0%	32.4%
Dermatology	0.00	0.00	0.00	3.00	0.00	1.00	0.0%	N/A	0.0%
Medical Microbiology	1.00	0.00	2.20	4.50	2.00	1.00	18.2%	0.0%	68.8%
Medical Physics	0.00	0.00	1.00	6.90	1.25	4.40	0.0%	0.0%	18.5%
Neurology	1.00	0.00	0.00	6.50	2.00	0.00	13.3%	0.0%	N/A
Neurological Surgery	0.00	1.00	0.00	1.00	1.00	3.00	0.0%	50.0%	0.0%
Oncology	3.00	0.00	0.75	10.90	0.00	1.00	21.6%	N/A	42.9%
Ophthalmology & Visual Sciences	1.60	2.00	0.00	6.00	4.00	1.00	21.1%	33.3%	0.0%
Orthopedics & Rehabilitation	0.00	1.00	0.00	3.00	3.50	5.00	0.0%	22.2%	0.0%
Pathology & Laboratory Medicine	2.00	3.00	0.00	6.51	3.00	4.00	23.5%	50.0%	0.0%
Pediatrics	1.00	2.00	6.75	10.20	1.00	2.00	8.9%	66.7%	77.1%
Pharmacology	1.00	0.00	1.00	6.00	1.00	2.00	14.3%	0.0%	33.3%
Biomolecular Chemistry	1.00	1.00	0.80	5.00	2.00	1.00	16.7%	33.3%	44.4%
Physiology	2.00	2.00	2.00	13.00	3.00	1.00	13.3%	40.0%	66.7%
Population Health Sciences	4.20	2.00	3.00	8.60	3.00	2.00	32.8%	40.0%	60.0%
Psychiatry	3.51	0.70	3.00	5.70	0.00	4.00	38.1%	100.0%	42.9%
Radiology	0.50	0.00	0.00	8.45	3.00	2.00	5.6%	0.0%	0.0%
Surgery	0.00	0.00	0.00	16.00	7.00	4.00	0.0%	0.0%	0.0%
School of Pharmacy	2.50	2.00	2.00	13.00	8.00	6.00	16.1%	20.0%	25.0%
Animal Health & Biomedical Sciences	0.00	0.00	1.00	5.00	0.00	1.00	0.0%	N/A	50.0%
Medical Sciences	1.00	1.00	1.00	4.00	6.00	1.00	20.0%	14.3%	50.0%
Pathobiological Sciences	0.00	1.00	0.00	8.00	3.00	1.00	0.0%	25.0%	0.0%
Comparative Biosciences	3.00	0.00	1.00	7.00	1.00	2.00	30.0%	0.0%	33.3%
Surgical Sciences	0.00	1.00	0.00	3.00	3.00	1.00	0.0%	25.0%	0.0%
Social Studies	**106.20**	**32.75**	**72.75**	**245.38**	**53.50**	**89.50**	**30.2%**	**38.0%**	**44.8%**
Agricultural & Applied Economics	0.00	0.00	1.00	16.40	3.00	1.00	0.0%	0.0%	50.0%
Life Sciences Communication	1.80	1.00	2.00	3.33	1.00	1.00	35.1%	50.0%	66.7%
Rural Sociology	2.00	0.00	1.00	6.00	2.00	2.00	25.0%	0.0%	33.3%
Natural Resources-Landscape Architecture	1.00	1.00	2.00	2.00	0.00	1.00	33.3%	100.0%	66.7%
Urban & Regional Planning	2.00	0.00	2.00	0.00	0.00	0.00	100.0%	N/A	100.0%
School of Business	2.00	3.75	11.00	32.75	16.00	16.00	5.8%	19.0%	40.7%
Counseling Psychology	0.00	2.00	2.00	3.00	1.00	0.00	0.0%	66.7%	100.0%
Curriculum & Instruction	7.50	1.00	4.25	13.55	0.00	4.00	35.6%	100.0%	51.5%
Educational Administration	1.00	2.00	0.00	6.67	0.00	3.00	13.0%	100.0%	0.0%

	Educational Policy Studies	2.00	1.00	1.00	5.00	1.00	1.00	28.6%	50.0%	50.0%
	Educational Psychology	3.00	0.00	1.00	7.00	1.50	2.00	30.0%	0.0%	33.3%
	Rehabilitation Psychology & Special Education	3.00	0.00	1.00	3.00	1.00	1.00	50.0%	0.0%	50.0%
	School of Human Ecology	14.20	5.00	5.00	8.00	1.00	5.00	64.0%	83.3%	50.0%
	Law School	9.50	1.00	2.00	20.25	4.00	5.00	31.9%	20.0%	28.6%
	Anthropology	5.50	0.00	1.00	7.00	0.00	6.00	44.0%	N/A	14.3%
	Afro-American Studies	4.00	0.00	1.00	4.25	1.00	1.00	48.5%	0.0%	50.0%
	Communication Arts	6.00	1.00	4.00	9.00	1.00	5.00	40.0%	50.0%	44.4%
	Economics	1.20	0.00	3.00	18.50	1.00	4.00	6.1%	0.0%	42.9%
	Ethnic Studies	1.00	0.00	0.00	9.00	0.00	0.00	10.0%	N/A	N/A
	Geography	0.00	1.00	2.00	0.00	3.00	2.00	N/A	25.0%	50.0%
	LaFollette School of Public Affairs	1.00	1.50	0.00	4.25	0.00	2.00	19.0%	100.0%	0.0%
	School of Journalism & Mass Communication	3.00	0.00	1.00	7.00	1.00	0.50	30.0%	0.0%	66.7%
	School of Library & Information Studies	1.00	1.00	4.00	1.00	0.00	0.50	50.0%	100.0%	88.9%
	Political Science	2.50	1.50	3.00	16.75	4.00	9.00	13.0%	27.3%	25.0%
	Psychology	9.00	4.00	0.00	14.00	2.00	7.00	39.1%	66.7%	0.0%
	Social Work	3.50	1.00	5.00	4.00	0.00	1.00	46.7%	100.0%	83.3%
	Sociology	8.00	0.00	6.50	15.42	7.00	7.50	34.2%	0.0%	46.4%
	Urban & Regional Planning	0.00	0.00	2.00	2.75	2.00	0.00	0.0%	0.0%	100.0%
	School of Nursing	11.50	3.00	7.00	0.00	0.00	0.00	100.0%	100.0%	100.0%
	Professional Development & Applied Studies	2.00	1.00	0.00	3.51	0.00	0.00	36.3%	100.0%	N/A
Humanities		**82.50**	**28.00**	**45.25**	**161.53**	**33.00**	**39.00**	**33.8%**	**45.9%**	**53.7%**
	Art	5.00	3.00	4.00	13.00	3.00	2.00	27.8%	50.0%	66.7%
	Dance	2.00	0.00	0.00	1.00	2.00	0.00	66.7%	0.0%	N/A
	African Languages & Literature	3.00	0.00	1.00	2.50	0.00	1.00	54.5%	N/A	50.0%
	Art History	4.00	0.00	4.00	1.75	3.00	0.00	69.6%	0.0%	100.0%
	Classics	3.00	1.00	2.00	2.00	0.50	1.00	60.0%	66.7%	66.7%
	Comparative Literature	1.00	0.00	0.00	2.00	1.00	2.00	33.3%	0.0%	0.0%
	East Asian Languages & Literature	1.00	1.00	3.00	3.00	1.00	1.00	25.0%	50.0%	75.0%
	English	15.70	3.00	8.00	19.50	1.00	6.00	44.6%	75.0%	57.1%
	French & Italian	5.00	2.00	2.00	11.25	2.00	1.00	30.8%	50.0%	66.7%
	German	3.00	2.00	1.00	8.60	2.00	1.00	25.9%	50.0%	50.0%
	Hebrew & Semitic Studies	1.00	1.00	1.00	2.00	0.00	1.00	33.3%	100.0%	50.0%
	History	10.50	3.00	2.00	23.00	4.50	7.00	31.3%	40.0%	22.2%
	History of Science	0.00	1.00	1.00	2.50	2.00	1.00	0.0%	33.3%	50.0%
	Linguistics	2.00	1.00	1.00	2.00	1.00	1.00	50.0%	50.0%	50.0%
	School of Music	7.00	4.00	2.00	25.10	4.00	2.00	21.8%	50.0%	50.0%
	Philosophy	2.00	0.00	2.00	17.00	0.00	2.00	10.5%	N/A	50.0%
	Scandinavian Studies	2.00	0.00	1.00	3.00	0.00	0.00	40.0%	N/A	100.0%
	Slavic Languages	2.00	1.00	0.00	6.00	0.00	2.00	25.0%	100.0%	0.0%
	Languages & Cultures of Asia	3.50	0.00	1.00	4.33	2.00	1.00	44.7%	0.0%	50.0%
	Spanish & Portuguese	3.00	2.00	4.00	7.00	1.00	4.00	30.0%	66.7%	50.0%
	Theatre & Drama	4.00	1.00	2.75	2.00	3.00	2.00	66.7%	25.0%	57.9%
	Women's Studies Program	0.00	0.00	2.50	0.00	0.00	0.00	N/A	N/A	100.0%

Liberal Studies & the Arts	2.80	2.00	0.00	3.00	0.00	0.00	48.3%	100.0%	N/A

SOURCE: October 2003 IADS Frozen slice
NOTE:
Faculty are assigned to Physical Sciences based on tenure home departments. An individual who is tenured in more than one department is shown based on the tenure split. E.g., a person who is 50% statistics and 50% plant pathology is shown as .5 FTE in Physical Sciences in this analysis. Faculty who have zero-dollar appointments, faculty who are paid wholly through an administrative appointment (such as dean or chancellor) are included in the total FTE count but excluded from the salary median and salary FTE calculations. Years are calculated based on current faculty appointment. (Some individuals who have held appointments at UW Madison prior to the current appointment. The years in the prior appointment are not included in this calculation.)
Prepared by : Mei-Hsia Chen, Office of Academic Planning and Analysis
January, 2004

Table 3a. Tenure Promotion Outcomes by Gender, 2003

1997 - 2003

Division/Department	Women			Men		
	Reviewed	Achieved	%	Reviewed	Achieved	%
Physical Sciences	5	5	100.0%	54	50	92.6%
Biological Sciences	28	24	85.7%	79	73	92.4%
Social Studies	34	31	91.2%	38	35	92.1%
Humanities	26	25	96.2%	30	28	93.3%

SOURCE: Office of the Secretary of the Faculty.

Table 3b. Tenure Promotion Outcomes by Gender, 2003

Physical Sciences

Entering Cohort*	Women					Men				
		Within 6 Years		Within 9 Years			Within 6 Years		Within 9 Years	
	Total Hired	Count	Percent	Count	Percent	Total Hired	Count	Percent	Count	Percent
1987-91	17	12	70.6	15	88.2	87	55	63.2	66	75.9
1991-95	7	3	42.9	3	42.9	36	22	61.1	29	80.6
1992-96	7	2	28.6	3	42.9	32	21	65.6	27	84.4

Biological Sciences

Entering Cohort	Women					Men				
		Within 6 Years		Within 9 Years			Within 6 Years		Within 9 Years	
	Total Hired	Count	Percent	Count	Percent	Total Hired	Count	Percent	Count	Percent
1987-91	29	8	27.6	16	55.2	101	57	56.4	70	69.3
1991-95	27	11	40.7	19	70.4	81	48	59.3	61	75.3
1992-96	28	12	42.9	20	71.4	78	46	59.0	57	73.1

Social Studies

Entering Cohort	Women					Men				
		Within 6 Years		Within 9 Years			Within 6 Years		Within 9 Years	
	Total Hired	Count	Percent	Count	Percent	Total Hired	Count	Percent	Count	Percent
1987-91	71	21	29.6	34	47.9	82	25	30.5	38	46.3
1991-95	47	18	38.3	25	53.2	49	24	49.0	28	57.1
1992-96	38	11	28.9	16	42.1	46	21	45.7	26	56.5

Humanities

Entering Cohort	Women					Men				
		Within 6 Years		Within 9 Years			Within 6 Years		Within 9 Years	
	Total Hired	Count	Percent	Count	Percent	Total Hired	Count	Percent	Count	Percent
1987-91	44	21	47.7	28	63.6	50	25	50.0	32	64.0
1991-95	27	16	59.3	21	77.8	25	15	60.0	19	76.0
1992-96	19	14	73.7	16	84.2	16	11	68.8	15	93.8

SOURCE: UW Madison Tenure file and IADS appointment information system, Dec 2003

NOTE:

Probationary faculty only. Adjustments made for time on tenure clock outside UW; no adjustments for tenure clock extensions. Two faculty hired in 1992-93, and one each hired in 1993-94 and 1994-95 still held probationary appointments after more than nine years.

NOTE:

Early cohort was hired between May 1987 and May 1991; later cohort was hired between May 1991 and May 1995/May 1992 and May 1996.

Prepared by : Margaret Harrigan, Office of Academic Planning and Analysis

January 2004

Table 4. Median Years in Rank by Gender, 2003

Division	Women			Men			Women's Median Time in Rank as % of Men's		
	Full	Associate	Assistant	Full	Associate	Assistant	Full	Associate	Assistant
Total	5	3	2	11	3	2	45.5%	100.0%	100.0%
Physical Sciences	3	0.5	2	12	2	2	25.0%	25.0%	100.0%
Biological Sciences	6	3	2	10	4	2	60.0%	75.0%	100.0%
Social Studies	6	3	3	12	2	2	50.0%	150.0%	150.0%
Humanities	5	3	2	11	3	3	45.5%	100.0%	66.7%

SOURCE: UW Madison IADS (Integrated Appointment Data System), October 2003

NOTE:

Years in rank computed only for those currently holding that rank. Assistant professors include two assistant professors with tenure.

Faculty are assigned to a discipline based on tenure home departments. An individual who is tenured in more than one department is shown based on the tenure split. E.g., a person who is 50% statistics and 50% plant pathology is shown as .5 FTE in Physical Sciences and .5 in Biological Sciences in this analysis. Faculty who have zero-dollar appointments, faculty who are paid wholly through an administrative appointment (such as dean or chancellor) are included in the total FTE count.

Prepared by : Mei-Hsia Chen, Office of Academic Planning and Analysis

February, 2004

Table 5a. Time at Institution (Median Numer of Years) by Gender and Rank, 2002

	Women				Men				Women's Median as % of Men's			
Division/Department	ALL	Full	Associate	Assistant	ALL	Full	Associate	Assistant	ALL	Full	Associate	Assistant
Physical Sciences	5.0	14.0	6.5	2.0	15.0	19.0	7.0	2.0	33.3%	73.7%	92.9%	100.0%
Biological Sciences	6.0	16.0	9.0	2.0	14.0	19.0	10.0	2.0	42.9%	84.2%	90.0%	100.0%
Social Studies	9.0	14.0	7.0	3.0	12.0	19.0	6.0	2.0	75.0%	73.7%	116.7%	150.0%
Humanities	11.0	16.0	7.5	2.0	14.0	19.0	7.0	3.0	78.6%	84.2%	107.1%	66.7%

SOURCE: October 2003 IADS Frozen slice
Prepared by : Mei-Hsia Chen, Office of Academic Planning and Analysis
January, 2004

Table 5b. Attrition by Gender, 2002-2003

	FTEs			%		
	Retired	Resigned	Total FTE	Retired	Resigned	Left UW
Total	63	32	2210.61	2.8%	1.4%	4.3%
Women	11	7	580.46	1.9%	1.2%	3.1%
Men	52	25	1630.15	3.2%	1.5%	4.7%
Physical Sciences						
Women	1	1	47.50	2.1%	2.1%	4.2%
Men	16	3	410.05	3.9%	0.7%	4.6%
Biological Sciences						
Women	3	3	165.51	1.8%	1.8%	3.6%
Men	19	9	598.19	3.2%	1.5%	4.7%
Social Studies						
Women	4	3	211.70	1.9%	1.4%	3.3%
Men	10	11	388.38	2.6%	2.8%	5.4%
Humanities						
Women	3	0	155.75	1.9%	0.0%	1.9%
Men	7	2	233.53	3.0%	0.9%	3.9%

SOURCE: IADS appointment system, Feb. 2004
NOTE:
Year is measured from July 1 through June 30.
Retired=all faculty who were age 55 or older at the time of termination.
Resigned=all faculty who were less than 55 years old at the time of termination.
Discipline is assigned based on appointment major department.
Prepared by : Margaret Harrigan, Office of Academic Planning and Analysis
February, 2004

Table 6. Number of Women in Science & Engineering Who are in Non-Tenure-Track Positions, 2003

	Women		Men		
	Mean FTE	Total FTE	Mean FTE	Total FTE	% Female
Physical Sciences					
Teaching	0.68	18.9	0.71	51.3	26.9%
Research	0.80	38.4	0.87	256.5	13.0%
Clinical	0.04	0.0	N/A	N/A	N/A
Biological Sciences					
Teaching	0.64	45.8	0.68	32.6	58.4%
Research	0.84	226.5	0.86	330.8	40.6%
Clinical	0.79	283.6	0.85	521.8	35.2%
Social Studies					
Teaching	0.55	81.5	0.50	61.5	57.0%
Research	0.79	67.4	0.81	54.3	55.4%
Clinical	0.69	38.7	0.95	14.3	73.1%
Humanities					
Teaching	0.55	53.7	0.59	34.3	61.0%
Research	0.78	2.3	1.00	8.0	22.6%
Clinical	0.85	0.9	1.00	2.0	29.8%
Administrative Units					
Teaching	0.61	4.3	0.55	2.8	60.8%
Research	0.85	4.3	0.92	5.5	43.6%
Clinical	0.38	2.7	0.52	1.6	63.2%

SOURCE: October Payroll 2003
NOTE:
Includes only paid appointments. Discipline is assigned based on payroll department. Administrative units are primarily Dean's offices. Teaching titles include Lecturer and Faculty Associate; Research titles include Researcher, Scientist, Visiting Scientist, Instrument Innovator, Research Animal Veterinarian; Clinical titles include Clinical Professor and Professor (CHS).
Prepared by: Mei-Hsia Chen, Office of Academic Planning and Analysis
January, 2004

Table 7a. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2003

	Total Faculty (Full Profs.)			Department Chairs				
Division	Women	Men	% Women	Women	Men	% Women	% Women Chairs	% Men Chairs
Physical Sciences	28	307	**8.4%**	1	18	**5.3%**	*3.6%*	*5.9%*
Biological Sciences	59	374	**13.6%**	2	46	**4.2%**	*3.4%*	*12.3%*
Social Studies	69	205	**25.2%**	7	18	**28.0%**	*10.1%*	*8.8%*
Humanities	92	168	**35.4%**	8	14	**36.4%**	*8.7%*	*8.3%*
Total	237	999	**19.2%**	18	96	**15.8%**	*7.6%*	*9.6%*

SOURCE: IADS appointment system frozen slice, October 2003.
NOTE: Total faculty is a non-duplicating headcount of full professors. Excludes faculty who are in schools without departments (Business, Pharmacy, Nursing, Law, Human Ecology). Faculty by discipline will not sum to total, since faculty with tenure in more than one department are counted in each department in which they hold tenure (excludes 0% tenure appointments). Faculty members are assigned to a discipline based on their tenure department (not divisional committee affiliation). Thus, all faculty in the department of Biochemistry are shown in the Biological Sciences area. The vast majority of department chairs also hold the rank of full professor. However, in any year, a small percentage of department chairs (e.g., 7chairs, or 6% of total in 2002) hold the rank of asociate professor.
Prepared by: Margaret Harrigan, Office of Academic Planning and Analysis
February 2004

Table 7b. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2003

	Total Faculty (Full Profs.)			Deans (Faculty)				
Division	Women	Men	% Women	Women	Men	% Women	% Women Deans	% Men Deans
Physical Sciences	25	309	**7.5%**	1	7	**12.5%**	*4.0%*	*2.3%*
Biological Sciences	59	356	**14.2%**	2	10	**16.7%**	*3.4%*	*2.8%*
Social Studies	97	253	**27.7%**	11	16	**40.7%**	*11.3%*	*6.3%*
Humanities	94	166	**36.2%**	3	3	**50.0%**	*3.2%*	*1.8%*
Total	275	1084	**20.2%**	17	36	**32.1%**	*6.2%*	*3.3%*

SOURCE: IADS Frozen Appointment Data view, October 2003.
NOTE: Includes both paid and zero-dollar deans, associate deans, and assistant deans. Faculty are assigned to a discipline based on the divisional committee responsible for approving their tenure. Each faculty member may choose only one affiliation. However, faculty in the same department may choose different affiliations. For example, about half of the faculty in Biochemistry are affiliated with the Biological Sciences Divisional Committee, and half are affiliated with the Physical Sciences Division. Only faculty report a divisional committee affiliation.
Prepared by: Mei-Hsia Chen and Margaret Harrigan, Office of Academic Planning and Analysis
March 2004

Table 7c. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2003

	Total Faculty (Full Profs.)			Central Administration				
Division	Women	Men	% Women	Women	Men	% Women	% Women Admin.	% Men Admin.
Physical Sciences	25	309	**7.5%**	1	1	**50.0%**	*4.0%*	*0.3%*
Biological Sciences	59	356	**14.2%**	0	2	**0.0%**	*0.0%*	*0.6%*
Social Studies	97	253	**27.7%**	2	1	**66.7%**	*2.1%*	*0.4%*
Humanities	94	166	**36.2%**	0	1	**N/A**	*0.0%*	*0.6%*
Total	275	1084	**20.2%**	3	5	**37.5%**	*1.1%*	*0.5%*

SOURCE: IADS Frozen Appointment Data view, October 2003.
NOTE: Faculty are assigned to a discipline based on the divisional committee responsible for approving their tenure. Each faculty member may choose only one affiliation. However, faculty in the same department may choose different affiliations. For example, about half of the faculty in Biochemistry are affiliated with the Biological Sciences Divisional Committee, and half are affiliated with the Physical Sciences Division. Only faculty report a divisional committee affiliation.
Prepared by: Mei-Hsia Chen and Margaret Harrigan, Office of Academic Planning and Analysis
March 2004

Table 7d. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2003

	Total Faculty (Full Profs.)			Center & Institute Directors				
Division	Women	Men	% Women	Women	Men	% Women	% Women Directors	% Men Directors
Physical Sciences	25	309	**7.5%**	0	19	**0.0%**	*0.0%*	*6.1%*
Biological Sciences	59	356	**14.2%**	2	13	**13.3%**	*3.4%*	*3.7%*
Social Studies	97	253	**27.7%**	6	16	**27.3%**	*6.2%*	*6.3%*
Humanities	94	166	**36.2%**	4	13	**23.5%**	*4.3%*	*7.8%*
Total	275	1084	**20.2%**	12	61	**16.4%**	*4.4%*	*5.6%*

SOURCE: IADS appointment system frozen slice, October 2003.
NOTE: Total faculty is a non-duplicating headcount of full professors. Faculty are assigned to a discipline based on their divisional committee affiliation. Includes both paid and zero-dollar academic program directors and assistant academic program directors.
Prepared by: Mei-Hsia Chen and Margaret Harrigan, Office of Academic Planning and Analysis
March 2004

Table 8. Number of Women Science & Engineering Faculty in Endowed/Named Chairs Chairs, 2003

	Women	Men	% Female
Named Professorships			
Vilas Professors	4	12	25.0%
Hilldale Professors	0	13	0.0%
John Bascom Professors	2	5	28.6%
Evju-Bascom Professors	3	6	33.3%
Named-Bascom Professors	13	38	25.5%
Steenbock Professors	1	7	12.5%
Wisconsin Distinguished Professors	0	9	0.0%
Other named professorships (incl. WARF)	27	183	12.9%
Holds two named professorships	6	36	14.3%
New named professorships	12	29	29.3%
Number holding named professorships	44	236	15.7%
Full Professors at UW-Madison	**275**	**1084**	**20.2%**
Major Awards			
Vilas Associate Award	7	19	26.9%
Hilldale Award	3	1	75.0%
H. I. Romnes Faculty Fellowship	3	1	75.0%
WARF Kellett Mid-Career Award	1	4	20.0%
Tenured Professors at UW-Madison	**381**	**1342**	**22.1%**

SOURCE: Office of the Provost. Totals from IADS appointment system frozen slice October 2003.
NOTE: Counts of Full Professors are headcounts of active "Professor" appointments in October 2003; counts of Tenured Professors are headcounts of active "Professor" and "Associate Professor" appointments in October 2003.
Prepared by: Jennifer Sheridan, WISELI
January, 2003

Table 9. Number and Percent of Women Science & Engineering Faculty on Promotion and Tenure Committees, 2003

	Women	Men	% Female
Faculty Senate			
Physical Sciences	2	44	4.3%
Biological Sciences	11	60	15.5%
Social Studies	21	39	35.0%
Arts & Humanities	18	24	42.9%
Senators (total)	**52**	**167**	**23.7%**
Physical Sciences	1	27	3.6%
Biological Sciences	21	45	31.8%
Social Studies	10	26	27.8%
Arts & Humanities	13	20	39.4%
Alternates (Total)	**45**	**118**	**27.6%**
Athletic Board	9	16	36.0%
Campus Planning Committee	4	10	28.6%
Divisional Executive Committees*			
Physical Sciences	2	10	16.7%
Bio. Sciences, Curriculum Planning	1	8	11.1%
Bio. Sciences, Strategic Planning	1	8	11.1%
Bio. Sciences, Tenure	3	9	25.0%
Social Studies	5	7	41.7%
Arts & Humanities	6	6	50.0%
Faculty Compensation and Economic Benefits Commission*	4	5	44.4%
Faculty Rights and Responsibilities Committee*	1	8	11.1%
Library Committee*	5	5	50.0%
University Committee*	2	4	33.3%
University Academic Planning Council	7	10	41.2%
Graduate School Academic Planning Council	1	7	12.5%
Graduate School Executive Committee			
Physical Sciences	0	5	0.0%
Biological Sciences	1	4	20.0%
Social Studies	2	4	33.3%
Arts & Humanities	3	1	75.0%
Graduate School Research Committee			
Physical Sciences	2	9	18.2%
Biological Sciences	4	8	33.3%
Social Studies	3	7	30.0%
Arts & Humanities	7	5	58.3%
All Faculty	**586**	**1650**	**26.2%**
Physical Sciences	**52**	**451**	**10.3%**
Biological Sciences	**150**	**558**	**21.2%**
Social Studies	**203**	**396**	**33.9%**
Arts & Humanities	**181**	**245**	**42.5%**

SOURCE: 2003-2004 Faculty Senate and UW-Madison Committees, Office of the Secretary of the faculty, November 2003. Totals from IADS appointment system frozen slice October 2003.
NOTE: Counts of All Faculty by Division are headcounts of active faculty appointments in October 2003. Unassigned faculty have been temporarily assigned a division according to their departmental affiliation and/or research interests.
Prepared by: Jennifer Sheridan, WISELI
January, 2004
* Members chosen by election of faculty.

Table 10a. Salary of Science & Engineering Faculty by Gender (Controlling for Department), 2003

Division/Department	Women, Median	Men, Median	Women's Median as % of Men's
Physical Sciences	**70,138**	**82,253**	**85.3%**
Biological Systems Engineering	55,636	80,725	68.9%
Soil Science	59,321	74,449	79.7%
Chemical & Biological Engineering	98,982	90,000	110.0%
Civil & Environmental Engineering	80,500	86,802	92.7%
Electrical & Computer Engineering	97,500	95,000	102.6%
Biomedical Engineering	71,000	110,000	64.5%
Industrial Engineering	95,000	118,410	80.2%
Mechanical Engineering	84,687	98,589	85.9%
Materials Science & Engineering	83,533	109,391	76.4%
Engineering Physics	81,750	101,852	80.3%
Engineering Professional Development	N/A	87,765	N/A
Astronomy	94,669	92,397	102.5%
Chemistry	60,112	100,123	60.0%
Computer Sciences	92,275	112,300	82.2%
Geology & Geophysics	69,361	73,540	94.3%
Mathematics	85,927	85,373	100.6%
Atmospheric & Oceanic Sciences	N/A	80,067	N/A
Physics	110,000	88,845	123.8%
Statistics	59,578	92,085	64.7%
Biological Sciences	**71,962**	**82,001**	**87.8%**
Agronomy	62,988	70,388	89.5%
Animal Science	N/A	83,536	N/A
Bacteriology	64,996	87,325	74.4%
Biochemistry	88,552	101,939	86.9%
Dairy Science	76,105	76,990	98.9%
Entomology	57,758	80,815	71.5%
Food Microbiology & Toxicology	73,759	78,358	94.1%
Food Science	56,127	80,747	69.5%
Genetics	74,019	97,534	75.9%
Horticulture	61,734	70,873	87.1%
Nutritional Sciences	74,468	74,356	100.2%
Plant Pathology	70,195	87,415	80.3%
Forest Ecology & Management	65,960	83,586	78.9%
Natural Resources - Wildlife Ecology	67,021	83,411	80.4%
Kinesiology	54,204	68,099	79.6%
Nelson Institute for Environmental Studies	70,000	85,983	81.4%
Botany	64,558	82,137	78.6%
Communicative Disorders	67,400	95,100	70.9%
Zoology	61,302	70,621	86.8%
Anatomy	74,815	93,092	80.4%
Anesthesiology	N/A	76,428	N/A
Biostatistics & Medical Informatics	80,478	85,260	94.4%

Family Medicine	114,469	94,899	120.6%
Genetics	60,136	77,092	78.0%
Obstetrics & Gynecology	61,860	87,545	70.7%
Medical History & Bioethics	135,473	90,307	150.0%
Human Oncology	67,289	83,874	80.2%
Medicine	69,545	81,818	85.0%
Dermatology	N/A	114,955	N/A
Medical Microbiology	60,545	94,178	64.3%
Medical Physics	71,554	77,497	92.3%
Neurology	98,790	94,363	104.7%
Neurological Surgery	63,278	58,091	108.9%
Oncology	94,810	105,627	89.8%
Ophthalmology & Visual Sciences	76,179	86,244	88.3%
Orthopedics & Rehabilitation	68,681	60,895	112.8%
Pathology & Laboratory Medicine	90,523	83,864	107.9%
Pediatrics	61,364	96,505	63.6%
Pharmacology	83,691	91,363	91.6%
Biomolecular Chemistry	75,273	84,754	88.8%
Physiology	79,227	93,886	84.4%
Population Health Sciences	85,700	84,044	102.0%
Psychiatry	67,395	79,228	85.1%
Radiology	77,501	72,437	107.0%
Surgery	N/A	69,534	N/A
School of Pharmacy	68,000	76,591	88.8%
Animal Health & Biomedical Sciences	63,179	81,573	77.5%
Medical Sciences	70,138	72,843	96.3%
Pathobiological Sciences	66,485	91,433	72.7%
Comparative Biosciences	81,200	77,097	105.3%
Surgical Sciences	73,363	68,003	107.9%
Social Studies	**74,818**	**91,059**	**82.2%**
Agricultural & Applied Economics	61,938	90,360	68.5%
Life Sciences Communication	66,639	83,187	80.1%
Rural Sociology	81,741	71,615	114.1%
Natural Resources-Landscape Architecture	59,295	72,119	82.2%
Urban & Regional Planning	N/A	65,779	N/A
School of Business	117,245	135,000	86.8%
Counseling Psychology	59,818	85,200	70.2%
Curriculum & Instruction	75,260	88,404	85.1%
Educational Administration	71,939	84,815	84.8%
Educational Policy Studies	64,380	83,556	77.0%
Educational Psychology	81,633	92,596	88.2%
Rehabilitation Psychology & Special Education	73,233	62,741	116.7%
School of Human Ecology	69,057	68,879	100.3%
Law School	121,206	114,728	105.6%
Anthropology	66,712	66,599	100.2%
Afro-American Studies	76,839	95,501	80.5%
Communication Arts	61,369	72,000	85.2%
Economics	72,775	141,419	51.5%
Ethnic Studies	90,000	N/A	N/A
Geography	52,500	82,563	63.6%

	LaFollette School of Public Affairs	87,500	101,728	86.0%
	School of Journalism & Mass Communication	84,291	72,071	117.0%
	School of Library & Information Studies	57,253	70,650	81.0%
	Political Science	74,794	77,335	96.7%
	Psychology	91,593	84,800	108.0%
	Social Work	61,281	87,244	70.2%
	Sociology	77,541	78,148	99.2%
	Urban & Regional Planning	55,967	70,517	79.4%
	School of Nursing	80,000	N/A	N/A
	Professional Development & Applied Studies	64,345	72,279	89.0%
Humanities		**64,796**	**73,239**	**88.5%**
	Art	60,539	67,672	89.5%
	Dance	61,678	60,167	102.5%
	African Languages & Literature	77,101	75,929	101.5%
	Art History	67,911	70,968	95.7%
	Classics	64,211	80,740	79.5%
	Comparative Literature	82,754	54,370	152.2%
	East Asian Languages & Literature	49,981	68,510	73.0%
	English	70,679	82,546	85.6%
	French & Italian	56,099	81,697	68.7%
	German	61,061	73,891	82.6%
	Hebrew & Semitic Studies	60,012	95,981	62.5%
	History	75,000	77,632	96.6%
	History of Science	59,393	63,005	94.3%
	Linguistics	64,965	57,492	113.0%
	School of Music	68,599	71,499	95.9%
	Philosophy	59,409	75,936	78.2%
	Scandinavian Studies	65,450	67,106	97.5%
	Slavic Languages	77,108	74,381	103.7%
	Languages & Cultures of Asia	72,274	70,473	102.6%
	Spanish & Portuguese	58,580	65,070	90.0%
	Theatre & Drama	66,757	59,661	111.9%
	Women's Studies Program	49,680	65,896	75.4%
	Liberal Studies & the Arts	66,970	75,463	88.7%

SOURCE: October 2003 IADS Frozen slice

NOTE:

Salaries reported are for personnel paid within the department only; department members being paid as administrators, or who hold zero-dollar appointments, are not counted. Salary paid on 9-month basis.

Prepared by : Mei-Hsia Chen, Office of Academic Planning and Analysis

January, 2004

Table 10b. Salary of Science & Engineering Faculty by Gender (Controlling for Department and Rank), 2003

Division/Department	Women's Median Salary			Men's Median Salary			Women's Median Salary as % of Men's		
	Full	Associate	Assistant	Full	Associate	Assistant	Full	Associate	Assistant
Physical Sciences	**99,000**	**81,981**	**70,000**	**102,258**	**79,543**	**69,635**	**96.8%**	**103.1%**	**100.5%**
Biological Systems Engineering	55,636	N/A	N/A	81,000	71,149	54,518	68.7%	N/A	N/A
Soil Science	N/A	63,434	58,844	79,684	65,204	56,517	N/A	97.3%	104.1%
Chemical & Biological Engineering	98,982	N/A	N/A	146,634	89,892	70,220	67.5%	N/A	N/A
Civil & Environmental Engineering	91,000	N/A	70,000	107,556	79,152	78,000	84.6%	N/A	89.7%
Electrical & Computer Engineering	104,500	N/A	90,500	106,000	93,750	79,750	98.6%	N/A	113.5%
Biomedical Engineering	N/A	N/A	71,000	120,824	110,000	78,000	N/A	N/A	91.0%
Industrial Engineering	99,000	92,500	75,000	124,802	92,250	75,000	79.3%	100.3%	100.0%
Mechanical Engineering	135,420	84,687	71,000	109,992	84,844	69,483	123.1%	99.8%	102.2%
Materials Science & Engineering	91,065	N/A	76,000	120,400	74,976	76,000	75.6%	N/A	100.0%
Engineering Physics	91,118	N/A	81,750	134,900	85,700	82,000	67.5%	N/A	99.7%
Engineering Professional Development	N/A	N/A	N/A	110,564	92,180	71,672	N/A	N/A	N/A
Astronomy	94,669	N/A	62,740	93,240	71,975	64,831	101.5%	N/A	96.8%
Chemistry	73,791	N/A	58,556	107,444	N/A	59,904	68.7%	N/A	97.7%
Computer Sciences	110,450	79,275	84,550	117,000	N/A	82,950	94.4%	N/A	101.9%
Geology & Geophysics	75,988	N/A	56,992	83,871	63,841	56,160	90.6%	N/A	101.5%
Mathematics	107,860	75,000	75,000	92,817	74,700	64,630	116.2%	100.4%	116.0%
Atmospheric & Oceanic Sciences	N/A	N/A	N/A	88,573	71,897	59,500	N/A	N/A	N/A
Physics	110,000	N/A	N/A	93,688	72,634	65,030	117.4%	N/A	N/A
Statistics	137,280	N/A	59,578	95,398	80,000	65,912	143.9%	N/A	90.4%
Biological Sciences	**93,737**	**70,138**	**59,771**	**93,084**	**71,927**	**59,606**	**100.7%**	**97.5%**	**100.3%**
Agronomy	N/A	62,988	N/A	70,474	N/A	57,273	N/A	N/A	N/A
Animal Science	N/A	N/A	N/A	87,278	74,185	56,964	N/A	N/A	N/A
Bacteriology	83,669	66,809	61,370	87,331	65,632	57,273	95.8%	101.8%	107.2%
Biochemistry	92,536	N/A	61,513	108,187	63,191	64,850	85.5%	N/A	94.9%
Dairy Science	N/A	76,105	N/A	84,940	63,740	58,441	N/A	119.4%	N/A
Entomology	75,748	N/A	56,902	86,839	N/A	56,193	87.2%	N/A	101.3%
Food Microbiology & Toxicology	73,759	N/A	N/A	83,056	N/A	59,824	88.8%	N/A	N/A
Food Science	N/A	N/A	56,127	83,678	N/A	63,435	N/A	N/A	88.5%
Genetics	N/A	74,019	N/A	99,173	72,764	63,266	N/A	101.7%	N/A
Horticulture	66,027	N/A	60,161	75,845	70,858	58,723	87.1%	N/A	102.4%
Nutritional Sciences	84,428	74,468	59,357	91,537	74,356	61,963	92.2%	100.2%	95.8%
Plant Pathology	86,178	66,628	58,160	89,183	82,001	57,643	96.6%	81.3%	100.9%
Forest Ecology & Management	65,960	N/A	N/A	92,854	63,105	55,688	71.0%	N/A	N/A
Natural Resources - Wildlife Ecology	N/A	67,021	N/A	87,190	67,817	N/A	N/A	98.8%	N/A
Kinesiology	83,080	60,245	52,000	83,836	58,309	52,750	99.1%	103.3%	98.6%
Nelson Institute for Environmental Studies	N/A	65,960	70,000	85,983	N/A	N/A	N/A	N/A	N/A

Botany	91,551	N/A	54,021	87,676	82,137	50,000	104.4%	N/A	108.0%
Communicative Disorders	81,553	72,800	59,859	99,800	69,678	N/A	81.7%	104.5%	N/A
Zoology	79,070	N/A	59,670	78,386	61,062	56,614	100.9%	N/A	105.4%
Anatomy	101,297	74,252	63,371	107,243	76,988	64,721	94.5%	96.4%	97.9%
Anesthesiology	N/A	N/A	N/A	94,582	69,319	70,415	N/A	N/A	N/A
Biostatistics & Medical Informatics	N/A	80,478	66,524	108,002	89,543	79,215	N/A	89.9%	84.0%
Family Medicine	114,469	N/A	N/A	99,999	91,709	94,899	114.5%	N/A	N/A
Genetics	N/A	74,019	60,136	88,936	72,764	61,364	N/A	101.7%	98.0%
Obstetrics & Gynecology	N/A	61,860	N/A	92,864	N/A	58,708	N/A	N/A	N/A
Medical History & Bioethics	135,473	N/A	57,935	122,727	N/A	58,575	110.4%	N/A	98.9%
Human Oncology	N/A	67,289	N/A	89,966	58,373	53,182	N/A	115.3%	N/A
Medicine	102,716	N/A	59,606	99,347	73,930	60,485	103.4%	N/A	98.5%
Dermatology	N/A	N/A	N/A	123,470	N/A	59,606	N/A	N/A	N/A
Medical Microbiology	98,222	N/A	60,545	111,377	89,321	63,862	88.2%	N/A	94.8%
Medical Physics	N/A	N/A	71,554	85,909	77,497	65,455	N/A	N/A	109.3%
Neurology	98,790	N/A	N/A	96,343	66,128	N/A	102.5%	N/A	N/A
Neurological Surgery	N/A	63,278	N/A	109,136	46,833	58,091	N/A	135.1%	N/A
Oncology	94,810	N/A	61,188	106,279	N/A	65,455	89.2%	N/A	93.5%
Ophthalmology & Visual Sciences	115,211	72,381	N/A	115,139	78,395	64,567	100.1%	92.3%	N/A
Orthopedics & Rehabilitation	N/A	68,681	N/A	106,364	58,717	60,000	N/A	117.0%	N/A
Pathology & Laboratory Medicine	94,353	80,669	N/A	101,666	72,403	49,183	92.8%	111.4%	N/A
Pediatrics	106,244	76,062	55,036	106,280	68,497	56,630	100.0%	111.0%	97.2%
Pharmacology	106,042	N/A	61,339	108,756	69,558	61,833	97.5%	N/A	99.2%
Biomolecular Chemistry	78,645	75,273	61,364	96,107	70,977	61,409	81.8%	106.1%	99.9%
Physiology	103,302	79,227	61,224	108,801	79,199	59,911	94.9%	100.0%	102.2%
Population Health Sciences	100,136	68,780	63,533	114,599	66,026	73,636	87.4%	104.2%	86.3%
Psychiatry	97,917	67,395	57,273	99,070	N/A	57,672	98.8%	N/A	99.3%
Radiology	77,501	N/A	N/A	88,663	56,738	65,800	87.4%	N/A	N/A
Surgery	N/A	N/A	N/A	75,331	64,164	36,450	N/A	N/A	N/A
School of Pharmacy	93,737	72,612	61,500	89,177	74,239	57,769	105.1%	97.8%	106.5%
Animal Health & Biomedical Sciences	N/A	N/A	63,179	88,651	N/A	57,273	N/A	N/A	110.3%
Medical Sciences	101,472	70,138	69,982	102,566	72,106	67,091	98.9%	97.3%	104.3%
Pathobiological Sciences	N/A	66,485	N/A	95,631	66,867	59,543	N/A	99.4%	N/A
Comparative Biosciences	88,323	N/A	57,273	87,570	58,727	62,537	100.9%	N/A	91.6%
Surgical Sciences	N/A	73,363	N/A	113,105	67,807	62,457	N/A	108.2%	N/A
Social Studies	**86,155**	**63,555**	**56,797**	**100,000**	**73,768**	**55,875**	**86.2%**	**86.2%**	**101.7%**
Agricultural & Applied Economics	N/A	N/A	61,938	99,219	82,002	66,000	N/A	N/A	93.8%
Life Sciences Communication	84,702	66,639	59,417	83,387	63,623	51,801	101.6%	104.7%	114.7%
Rural Sociology	86,299	N/A	59,411	88,450	70,634	56,556	97.6%	N/A	105.0%
Natural Resources-Landscape Architecture	91,676	64,604	53,584	81,036	N/A	54,000	113.1%	N/A	99.2%
Urban & Regional Planning	77,628	N/A	58,297	N/A	N/A	N/A	N/A	N/A	N/A
School of Business	167,119	125,117	115,619	153,144	132,671	105,234	109.1%	94.3%	109.9%
Counseling Psychology	N/A	68,000	52,318	86,138	61,282	N/A	N/A	111.0%	N/A
Curriculum & Instruction	82,379	60,658	55,237	93,996	N/A	55,839	87.6%	N/A	98.9%

	Educational Administration	72,392	67,747	N/A	95,086	N/A	55,527	76.1%	N/A	N/A
	Educational Policy Studies	83,794	59,491	52,000	95,311	65,953	52,906	87.9%	90.2%	98.3%
	Educational Psychology	84,829	N/A	53,288	96,992	67,257	55,935	87.5%	N/A	95.3%
	Rehabilitation Psychology & Special Education	76,299	N/A	57,000	82,796	62,741	57,000	92.2%	N/A	100.0%
	School of Human Ecology	77,184	61,996	53,976	75,097	57,737	56,039	102.8%	107.4%	96.3%
	Law School	126,891	98,979	87,463	130,709	98,863	89,585	97.1%	100.1%	97.6%
	Anthropology	66,712	N/A	52,745	77,273	N/A	49,500	86.3%	N/A	106.6%
	Afro-American Studies	80,317	N/A	54,000	98,052	57,799	51,000	81.9%	N/A	105.9%
	Communication Arts	66,685	58,007	52,000	77,107	62,752	50,097	86.5%	92.4%	103.8%
	Economics	127,272	N/A	72,775	150,000	120,000	70,162	84.8%	N/A	103.7%
	Ethnic Studies	90,000	N/A	N/A	91,826	N/A	N/A	98.0%	N/A	N/A
	Geography	N/A	57,392	51,610	N/A	60,414	54,500	N/A	95.0%	94.7%
	LaFollette School of Public Affairs	87,951	87,500	N/A	106,914	N/A	62,853	82.3%	N/A	N/A
	School of Journalism & Mass Communication	90,801	N/A	53,689	73,361	64,961	51,950	123.8%	N/A	103.3%
	School of Library & Information Studies	78,966	59,505	54,425	70,650	N/A	51,950	111.8%	N/A	104.8%
	Political Science	101,816	76,670	53,173	98,437	66,600	54,256	103.4%	115.1%	98.0%
	Psychology	111,734	61,324	N/A	100,797	59,211	55,482	110.9%	103.6%	N/A
	Social Work	86,451	61,281	58,826	87,689	N/A	55,900	98.6%	N/A	105.2%
	Sociology	97,661	N/A	54,567	112,245	71,000	53,710	87.0%	N/A	101.6%
	Urban & Regional Planning	N/A	N/A	55,967	83,969	62,269	N/A	N/A	N/A	N/A
	School of Nursing	90,416	80,315	59,119	N/A	N/A	N/A	N/A	N/A	N/A
	Professional Development & Applied Studies	64,591	51,822	N/A	72,279	N/A	N/A	89.4%	N/A	N/A
Humanities		**74,594**	**60,291**	**51,340**	**78,897**	**59,293**	**50,647**	**94.5%**	**101.7%**	**101.4%**
	Art	66,799	59,293	52,429	75,105	59,293	50,985	88.9%	100.0%	102.8%
	Dance	61,678	N/A	N/A	60,167	57,707	N/A	102.5%	N/A	N/A
	African Languages & Literature	78,010	N/A	51,340	83,385	N/A	49,684	93.6%	N/A	103.3%
	Art History	76,271	N/A	49,832	78,873	61,407	N/A	96.7%	N/A	N/A
	Classics	71,125	58,062	50,827	82,736	55,403	48,991	86.0%	104.8%	103.7%
	Comparative Literature	82,754	N/A	N/A	75,188	54,370	46,953	110.1%	N/A	N/A
	East Asian Languages & Literature	91,777	56,132	47,000	79,218	54,372	56,197	115.9%	103.2%	83.6%
	English	87,296	64,504	51,744	86,991	63,152	51,382	100.4%	102.1%	100.7%
	French & Italian	77,570	54,644	52,676	82,330	59,583	50,000	94.2%	91.7%	105.4%
	German	70,864	59,078	52,812	75,988	55,104	49,596	93.3%	107.2%	106.5%
	Hebrew & Semitic Studies	64,540	60,012	51,375	97,689	N/A	50,679	66.1%	N/A	101.4%
	History	79,069	61,980	50,089	93,384	58,462	52,920	84.7%	106.0%	94.6%
	History of Science	N/A	69,953	48,833	81,330	61,025	49,920	N/A	114.6%	97.8%
	Linguistics	75,095	56,998	47,000	84,033	57,492	50,132	89.4%	99.1%	93.8%
	School of Music	70,110	63,996	48,878	74,154	55,542	53,069	94.5%	115.2%	92.1%
	Philosophy	75,859	N/A	51,495	77,445	N/A	47,340	98.0%	N/A	108.8%
	Scandinavian Studies	70,887	N/A	48,224	67,106	N/A	N/A	105.6%	N/A	N/A
	Slavic Languages	87,649	55,683	N/A	78,664	N/A	51,433	111.4%	N/A	N/A
	Languages & Cultures of Asia	74,884	N/A	50,000	76,062	68,619	50,946	98.5%	N/A	98.1%
	Spanish & Portuguese	72,901	60,472	48,939	70,331	57,805	48,436	103.7%	104.6%	101.0%
	Theatre & Drama	82,975	63,651	52,785	88,977	59,661	48,574	93.3%	106.7%	108.7%

Women's Studies Program	N/A	N/A	49,680	N/A	N/A	N/A	N/A	N/A	N/A
Liberal Studies & the Arts	66,970	63,371	N/A	75,463	N/A	N/A	88.7%	N/A	N/A

SOURCE: October 2003 IADS Frozen slice
NOTE:
Salaries reported are for personnel paid within the department only; department members being paid as administrators, or who hold zero-dollar appointments, are not counted. Salary paid on 9-month basis.
Prepared by : Mei-Hsia Chen, Office of Academic Planning and Analysis
January, 2004

Table 11a. Mean Office Space Square Footage, by Gender, 2003

Division/Department	Mean Sq. Ft., Women	Mean Sq. Ft., Men	Women's Mean as % of Men's
Physical Sciences	**171.59**	**164.83**	**104.1%**
CALS	***184.33***	***164.03***	***112.4%***
Biological Systems Engineering	161.00	155.75	103.4%
Soil Science	196.00	169.88	115.4%
Engineering	***167.56***	***164.97***	***101.6%***
Chemical & Biological Engineering	126.00	166.88	75.5%
Civil & Environmental Engineering	174.50	196.28	88.9%
Electrical & Computer Engineering	140.50	147.64	95.2%
Biomedical Engineering	121.24	128.48	94.4%
Industrial Engineering	181.00	204.30	88.6%
Mechanical Engineering	230.41	167.74	137.4%
Materials Science & Engineering	147.50	191.54	77.0%
Engineering Physics	113.00	126.18	89.6%
Biological Sciences	**148.00**	**153.29**	**96.5%**
CALS	***153.66***	***159.56***	***96.3%***
Agronomy	165.30	195.06	84.7%
Animal Science	N/A	174.96	N/A
Bacteriology	180.00	184.07	97.8%
Biochemistry	148.62	173.83	85.5%
Dairy Science	147.00	125.45	117.2%
Entomology	126.01	115.70	108.9%
Food Microbiology & Toxicology	123.14	150.78	81.7%
Food Science	193.59	209.07	92.6%
Genetics	121.00	121.88	99.3%
Horticulture	214.00	186.97	114.5%
Nutritional Sciences	184.23	175.33	105.1%
Plant Pathology	116.36	105.21	110.6%
Forest Ecology & Management	117.00	144.93	80.7%
Natural Resources - Wildlife Ecology	121.50	137.25	88.5%
Pharmacy	***152.33***	***172.06***	***88.5%***
School of Pharmacy	152.33	172.06	88.5%
VetMed	***121.80***	***122.09***	***99.8%***
Animal Health & Biomedical Sciences	183.00	172.50	106.1%
Medical Sciences	115.00	115.00	100.0%
Pathobiological Sciences	115.00	114.50	100.4%
Comparative Biosciences	115.00	111.89	102.8%
Surgical Sciences	115.00	115.00	100.0%

SOURCE: Data provided by CALS, Engineering, VetMed, Pharmacy.
NOTE:
Not all schools/colleges provided data in the same format. L&S provided only total space data; CALS provided only office space data; MedSch provided no data.
Prepared by : Jennifer Sheridan, WISELI
March, 2004

Table 11b. Mean Lab Space Square Footage, by Gender, 2003

Division/Department	Mean Sq. Ft., Women	Mean Sq. Ft., Men	Women's Mean as % of Men's
Physical Sciences	**530.60**	**1087.45**	**48.8%**
Engineering	***530.60***	***1087.45***	***48.8%***
Chemical & Biological Engineering	1183.00	1536.81	77.0%
Civil & Environmental Engineering	187.00	782.37	23.9%
Electrical & Computer Engineering	606.00	1035.08	58.5%
Biomedical Engineering	515.29	1202.47	42.9%
Industrial Engineering	254.50	165.75	153.5%
Mechanical Engineering	497.67	710.47	70.0%
Materials Science & Engineering	796.50	1551.01	51.4%
Engineering Physics	773.00	1176.54	65.7%
Biological Sciences	**673.19**	**902.38**	**74.6%**
Pharmacy	***950.50***	***1323.41***	***71.8%***
School of Pharmacy	950.50	1323.41	71.8%
VetMed	***590.00***	***730.14***	***80.8%***
Animal Health & Biomedical Sciences	1050.00	1260.83	83.3%
Medical Sciences	200.00	468.00	42.7%
Pathobiological Sciences	900.00	785.50	114.6%
Comparative Biosciences	712.50	910.00	78.3%
Surgical Sciences	500.00	414.29	120.7%

SOURCE: Data provided by Engineering, VetMed, Pharmacy.
NOTE:
Not all schools/colleges provided data in the same format. L&S provided only total space data; CALS provided only office space data; MedSch provided no data.
Prepared by : Jennifer Sheridan, WISELI
March, 2004

Table 11c. Mean TOTAL Space Square Footage, by Gender, 2003

Division/Department	Mean Sq. Ft., Women	Mean Sq. Ft., Men**	Women's Mean as % of Men's
Physical Sciences	**585.46**	**621.48**	**94.2%**
CALS	***184.33***	***164.03***	***112.4%***
Biological Systems Engineering	161.00	155.75	103.4%
Soil Science	196.00	169.88	115.4%
Engineering	***614.38***	***691.38***	***88.9%***
Chemical & Biological Engineering	1309.00	1415.53	92.5%
Civil & Environmental Engineering	268.00	352.75	76.0%
Electrical & Computer Engineering	746.50	678.45	110.0%
Biomedical Engineering	636.53	729.72	87.2%
Industrial Engineering	350.67	270.60	129.6%
Mechanical Engineering	728.08	486.23	149.7%
Materials Science & Engineering	944.00	1265.32	74.6%
Engineering Physics	886.00	683.49	129.6%
L&S	***678.31***	***633.48***	***107.1%***
Astronomy	176.67	216.00	81.8%
Chemistry	2386.86	916.00	260.6%
Computer Sciences	144.33	311.00	46.4%
Geology & Geophysics	632.67	1169.00	54.1%
Mathematics	145.43	228.00	63.8%
Atmospheric & Oceanic Sciences	N/A	942.00	N/A
Physics	218.00	988.00	22.1%
Statistics	140.00	236.00	59.3%
Biological Sciences	**359.70**	**450.28**	**79.9%**
CALS	***153.66***	***159.56***	***96.3%***
Agronomy	165.30	195.06	84.7%
Animal Science	N/A	174.96	N/A
Bacteriology	180.00	184.07	97.8%
Biochemistry	148.62	173.83	85.5%
Dairy Science	147.00	125.45	117.2%
Entomology	126.01	115.70	108.9%
Food Microbiology & Toxicology	123.14	150.78	81.7%
Food Science	193.59	209.07	92.6%
Genetics	121.00	121.88	99.3%
Horticulture	214.00	186.97	114.5%
Nutritional Sciences	184.23	175.33	105.1%
Plant Pathology	116.36	105.21	110.6%
Forest Ecology & Management	117.00	144.93	80.7%
Natural Resources - Wildlife Ecology	121.50	137.25	88.5%
L&S	***517.56***	***891.38***	***58.1%***
Botany	890.00	1055.00	84.4%
Communicative Disorders	314.75	306.00	102.9%
Zoology	487.60	843.00	57.8%
Pharmacy	***1102.83***	***1495.46***	***73.7%***
School of Pharmacy	1102.83	1495.46	73.7%
VetMed	***711.80***	***852.23***	***83.5%***
Animal Health & Biomedical Sciences	1233.00	1433.33	86.0%
Medical Sciences	315.00	583.00	54.0%
Pathobiological Sciences	1015.00	900.00	112.8%
Comparative Biosciences	827.50	1021.89	81.0%
Surgical Sciences	615.00	529.29	116.2%

SOURCE: Data provided by CALS, Engineering, L&S, VetMed, Pharmacy.
NOTE:
Not all schools/colleges provided data in the same format. L&S provided only total space data; CALS provided only office space data; MedSch provided no data.
** For L&S only, the mean for "Men" is actually an average for all faculty (men and women) in the dept.
Prepared by : Jennifer Sheridan, WISELI
March, 2004

Table 12a. Offers Made, 2000-2003

Division/School	Junior Offers Made			Junior Offers Accepted			
				Women		Men	
	Women	Men	% Women	N	% Accept	N	% Accept
Physical Sciences	**29**	**93**	**23.8%**	**17**	**58.6%**	**56**	**60.2%**
College of Engineering	13	43	23.2%	9	69.2%	29	67.4%
Letters & Sciences	12	46	20.7%	4	33.3%	23	50.0%
College of Agricultural & Life Sciences	4	4	50.0%	4	100.0%	4	100.0%
Biological Sciences	**57**	**102**	**35.8%**	**50**	**87.7%**	**87**	**85.3%**
Letters & Sciences	10	4	71.4%	9	90.0%	4	100.0%
School of Veterinary Medicine	2	5	28.6%	2	100.0%	5	100.0%
School of Pharmacy	1	1	50.0%	1	100.0%	1	100.0%
Medical School*	34	69	33.0%	28	82.4%	54	78.3%
College of Agricultural & Life Sciences	10	23	30.3%	10	100.0%	23	100.0%

Division/School	Tenured** Offers Made			Tenured** Offers Accepted			
				Women		Men	
	Women	Men	% Women	N	% Accept	N	% Accept
Physical Sciences							
College of Engineering	2	8	20.0%	0	0.0%	7	87.5%
Letters & Sciences	6	15	28.6%	3	50.0%	9	60.0%
College of Agricultural & Life Sciences	0	0	N/A	0	N/A	0	N/A
Biological Sciences							
Letters & Sciences	2	1	66.7%	0	0.0%	1	100.0%
School of Veterinary Medicine	1	1	50.0%	0	0.0%	1	100.0%
School of Pharmacy	0	3	0.0%	0	N/A	3	100.0%
Medical School	6	32	15.8%	5	83.3%	21	65.6%
College of Agricultural & Life Sciences	1	3	25.0%	1	100.0%	2	66.7%

* One offer decision is pending.

** Associate Professor and Professor titles.

Table 12b. Base Salary (12 Month) Offers, 2000-2003

Division/School	Base Salary, Offers Made, Junior Faculty				Women's Median as % of Men's	Base Salary, Offers Accepted, Junior Faculty				Women's Median as % of Men's
	Women		Men			Women		Men		
	Median	Range (K)	Median	Range (K)		Median	Range (K)	Median	Range (K)	
Physical Sciences	**$93,333**	**$65 - $107**	**$93,333**	**$61 - $173**	**100.0%**	**$93,333**	**$65 - $105**	**$88,000**	**$62 - $123**	**106.1%**
College of Engineering	$100,000	$88 - $105	$96,000	$85 - $123	104.2%	$96,000	$88 - $105	$96,000	$85 - $123	100.0%
Letters & Sciences	$78,333	$69 - $107	$87,333	$61 - $173	89.7%	$76,667	$69 - $100	$80,000	$72 - $110	95.8%
College of Agricultural & Life Sciences	$68,250	$65 - $70	$68,000	$62 - $78	100.4%	$68,250	$65 - $70	$68,000	$62 - $78	100.4%
Biological Sciences	**$72,500**	**$49 - $104**	**$70,000**	**$40 - $116**	**103.6%**	**$73,000**	**$49 - $104**	**$70,000**	**$40 - $116**	**104.3%**
Letters & Sciences	$76,000	$67 - $97	$72,400	$67 - $80	105.0%	$76,000	$67 - $97	$72,400	$67 - $80	105.0%
School of Veterinary Medicine	**	**	**	**	N/A	**	**	**	**	**
School of Pharmacy	$73,333	$73	$70,667	$71	103.8%	$73,333	$73	$70,667	$71	103.8%
Medical School*	$71,100	$49 - $85	$70,000	$40 - $116	101.6%	$72,500	$49 - $85	$70,000	$40 - $116	103.6%
College of Agricultural & Life Sciences	$71,000	$62 - $104	$68,000	$62 - $108	104.4%	$71,000	$62 - $104	$68,000	$62 - $108	104.4%

Division/School	Base Salary, Offers Made, Tenured Faculty				Women's Median as % of Men's	Base Salary, Offers Accepted, Tenured Faculty				Women's Median as % of Men's
	Women		Men			Women		Men		
	Median	Range (K)	Median	Range (K)		Median	Range (K)	Median	Range (K)	
Physical Sciences	**$126,667**	**$88 - $147**	**$126,667**	**$97 - $200**	**100.0%**	**$132,000**	**$96 - $147**	**$122,667**	**$97 - $160**	**107.6%**
College of Engineering	$130,000	$127 - $133	$129,000	$120 - $153	100.8%	N/A	N/A	$127,333	$120 - $153	N/A
Letters & Sciences	$111,333	$88 - $147	$122,667	$97 - $200	90.8%	$132,000	$96 - $147'	$113,333	$97 - $160	116.5%
College of Agricultural & Life Sciences	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Biological Sciences	**$120,000**	**$90 - $150**	**$105,333**	**$52 - $168**	**113.9%**	**$108,500**	**$90 - $135**	**$105,333**	**$52 - $168**	**103.0%**
Letters & Sciences	$112,667	$100 - $125	$105,333	$105	107.0%	N/A	N/A	$105,333	$105	N/A
School of Veterinary Medicine	**	**	**	**	**	**	**	**	**	**
School of Pharmacy	N/A	N/A	$100,000	$97 - $140	N/A	N/A	N/A	$100,000	$97 - $140	N/A
Medical School***	$123,000	$90 - $150	$107,500	$52 - $160	114.4%	$120,000	$90 - $135	$105,000	$52 - $160	114.3%
College of Agricultural & Life Sciences	$97,000	$97	$132,500	$90 - $168	73.2%	$97,000	$97	$150,250	$133 - $168	64.6%

* One offer decision is pending.

** Data not provided.

*** Four faculty who rejected offers have missing data for Base Salary.

Table 12c. Total Startup Package* Offers, 2000-2003

Division/School	Total Startup, Offers Made, Junior Faculty: Women Median	Women Range (K)	Men Median	Men Range (K)	Women's Median as % of Men's	Total Startup, Offers Accepted, Junior Faculty: Women Median	Women Range (K)	Men Median	Men Range (K)	Women's Median as % of Men's
Physical Sciences	**$198,800**	**$63 - $818**	**$185,592**	**$14 - $1286**	**107.1%**	**$219,000**	**$63 - $536**	**$176,200**	**$27 - $662**	**124.3%**
College of Engineering	$198,800	$64 - $536	$199,888	$27 - $662	99.5%	$199,720	$68 - $536	$187,000	$27 - $662	106.8%
Letters & Sciences	$162,950	$75 - $818	$141,150	$14 -$1286	115.4%	$246,550	$133 - $454	$119,100	$28 - $584	207.0%
College of Agricultural & Life Sciences	$235,000	$63 - $431	$231,750	$178 - $446	101.4%	$235,000	$63 - $431	$231,750	$178 - $446	101.4%
Biological Sciences	**$222,000**	**$3 - $632**	**$225,000**	**$34 - $1182**	**98.7%**	**$221,250**	**$3 - $540**	**$225,000**	**$34 - $1182**	**98.3%**
Letters & Sciences	$168,000	$81 - $324	$213,700	$191 - $485	78.6%	$171,500	$81 - $324	$213,700	$191 - $485	80.3%
School of Veterinary Medicine	$309,278	$288 - $331	$255,000	$201 - $330	121.3%	$309,278	$288 - $331	$255,000	$201 - $330	121.3%
School of Pharmacy	$539,900	$540	$314,403	$314	171.7%	$539,900	$540	$314,403	$314	171.7%
Medical School**	$223,500	$3 - $632	$230,000	$34 - $430	97.2%	$211,500	$3 - $500	$225,000	$34 - $430	94.0%
College of Agricultural & Life Sciences	$242,000	$173 - $450	$219,500	$60 -$1182	110.3%	$232,000	$173 - $450	$219,500	$60 -$1182	105.7%

Division/School	Total Startup, Offers Made, Tenured Faculty: Women Median	Women Range (K)	Men Median	Men Range (K)	Women's Median as % of Men's	Total Startup, Offers Accepted, Tenured Faculty: Women Median	Women Range (K)	Men Median	Men Range (K)	Women's Median as % of Men's
Physical Sciences	**$211,075**	**$76 - $711**	**$130,468**	**$5 - $734**	**161.8%**	**$230,250**	**$192 - $286**	**$121,234**	**$5 - $734**	**189.9%**
College of Engineering	$191,579	$76 - $307	$150,000	$69 - $734	127.7%	N/A	N/A	$154,000	$69 - $734	N/A
Letters & Sciences	$211,075	$94 - $711	$73,200	$5 - $625	288.4%	$230,250	$192 - $286	$49,500	$5 - $160	465.2%
College of Agricultural & Life Sciences	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Biological Sciences	**$183,000**	**$54 - $504**	**$310,500**	**$40 - $1403**	**58.9%**	**$243,000**	**$54 - $504**	**$297,000**	**$40 - $1403**	**81.8%**
Letters & Sciences	$123,000	$106 - $141	$294,000	$294	41.8%	N/A	N/A	$294,000	$294	N/A
School of Veterinary Medicine	$320,000	$320	$262,400	$262	122.0%	N/A	N/A	$262,400	$262	N/A
School of Pharmacy	N/A	N/A	$676,009	$517 - 810	N/A	N/A	N/A	$676,009	$517 - 810	N/A
Medical School*	$183,000	$54 - $425	$292,500	$40 - $600	62.6%	$186,000	$54 - $425	$270,000	$40 - $500	68.9%
College of Agricultural & Life Sciences	$504,000	$504	$450,000	$400 - $1403	112.0%	$504,000	$504	$926,500	$450 - $1403	54.4%

* Total Startup Package does not include Base Salary.

** One offer decision is pending.