
# Annual Report of ADVANCE program for University of Wisconsin-Madison
# 2004

**Principals, *University of Wisconsin-Madison*:**

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

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# *Executive Summary: Major Accomplishments in Year 3*

"'They are holding the conversation' on a campus where there has been silence on gender issues.[1]" This assessment, from the report of our site visit review in November 2004, indicates the important qualitative success that the Women in Science & Engineering Leadership Institute (WISELI) has had in engaging faculty, staff and administrators in discussions of gender equity at the UW-Madison. It is the ability to have such conversations that underlies the more quantifiable successes we highlight in this Annual Report.

During the past year, WISELI has continued the important work begun in years one and two. We have implemented the two workshop series we designed; we have communicated our research findings with multiple audiences; we have produced guidebooks, brochures, and a documentary video that have had national visibility; we have provided grants to faculty and staff to increase both the visibility and the advancement of women in the sciences and engineering on campus; and we have continued to collaborate with other active and successful diversity efforts both on campus and off.

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

## Workshops

- We continued implementing workshops for chairs of search committees. We designed multiple formats for use in training chairs of hiring committees and have broadened the training to include other faculty and staff, training over 70 individuals this year.
- We implemented an innovative workshop series for department chairs to improve climate. The discovery-based approach used in these workshops has reached 15 chairs, and over 2,000 department members have taken part in the workshops' climate surveys.
- The Office of the Provost invited WISELI input and presentation to their all-day training workshop for new department chairs (August 2004).

## Grants

- We awarded seven new Celebrating Women in Science & Engineering grants.
- In partnership with the Graduate School and the Office of the Provost, WISELI: (1) provided funding for 6 more faculty members at vulnerable junctures in their

[1] Fouke, Janie; Robert Drago; Elizabeth Higgenbotham, Catherine Mavriplis, JoAnn Moody, Susan Fitzpatrick, Lloyd Douglas, and Alice Hogan. 2004. "ADVANCE Program Site Visit Report: The University of Wisconsin at Madison. November 7-9, 2004."

research through the Life Cycle Research Grant initiative; and (2) is developing a strategy to permanently fund the Life Cycle Research Grant program for all UW-Madison faculty.

## Research & Evaluation

- An overview of findings from the in-depth interviews with 26 women faculty in the biological and physical sciences was presented to the public at the March 22, 2004 WISELI Seminar.
- We continued analyses of campus-wide surveys of climate for faculty and staff and reported results to over 20 groups on campus, including department chairs, committees, departmental seminars, and informal groups of women faculty. We have also presented survey results in at least four venues outside the UW-Madison.
- We have combined in-depth interview data with faculty survey data to produce:
    - three evaluation reports of existing campus programs (Women Faculty Mentoring Program, Tenure Clock Extension Policy, and Campus Childcare); and
    - an issue study (draft) outlining the importance of the department chair in creating the climate for women faculty.
- Ten women faculty who left the University from 2000 to 2004 have been interviewed for an issue study of "Why Women Leave." Analysis of these data will proceed in early 2005.
- A paper outlining the process of interviewing senior women faculty has been accepted for a special issue of the *Journal of Technology Transfer*.
- An ethnographic study of men and women faculty in science and engineering is continuing.
- Analysis of men's and women's conversation in naturally-occurring academic meetings is ongoing, and a book proposal has been developed to publish the study once complete.

## Leadership

- WISELI Leadership Team members continue to occupy key positions that have influence over gender-related policy and practice: Gary Sandefur, Dean of the College of Letters & Sciences; Molly Carnes, University Committee; Amy Wendt, Physical Sciences Research Committee (Graduate School).
- WISELI's co-Directors have leveraged resources from the Office of the Provost for administrative help for WISELI personnel, and from the Office of the Provost and the Graduate School for continued implementation of the Life Cycle Research Grant program.
- WISELI leaders continue to provide guidance, coaching, and mentorship to individual women students, faculty, and staff. Such activities have contributed to success in grant funding, conversion to tenure track, departmental re-assignment,

tenure achievement, and less-quantifiable outcomes of improved satisfaction with professional life.

- The WISELI Seminars, held three times per semester, continue to attract a large audience (30-40 attendees) from multiple departments and schools.
- WISELI has collaborated with the Diversity Affairs Office in the College of Engineering to: (1) develop a Louis Stokes Alliance for Minority Participation program focusing on increasing the diversity in the academic pipeline in science and engineering (awarded November 2004); and (2) submit a proposal to NSF for an Alliance for Graduate Education and the Professoriate (under review).

## Other

- The WISELI Year One video was publicly screened in February 2004. This documentary video is currently in rotation on *The Research Channel*, making it available to a national audience. During 2004, we completed filming for the next video, to be edited and screened in Spring 2005.
- The WISELI Seminars, held three times per semester, continue to attract a large audience (30-40 attendees) from multiple departments and schools.
- WISELI has collaborated with the Diversity Affairs Office in the College of Engineering to: (1) develop a Louis Stokes Alliance for Minority Participation program focusing on increasing the diversity in the academic pipeline in science and engineering (awarded November 2004); and (2) submit a proposal to NSF for an Alliance for Graduate Education and the Professoriate (under review).

In addition to these concrete programmatic elements, we have engaged in a process of self-examination during this past year that has resulted in additional resources and enhancements to our research and initiatives.

- Detailed justifications for some of our decisions (requested after our 2003 Annual Report was submitted) helped us articulate and make explicit some of our operating assumptions.
- Our External Advisory Team visited campus on June 2nd, 2004. They met with WISELI co-Directors and Leadership Team, as well as the Provost and Associate Vice Chancellor for Diversity and Climate. After the visit they provided a review of our program and recommendations. This letter helped us leverage administrative support from the Office of the Provost.
- Dr. Joseph Bordogna, NSF Deputy Director, visited campus on June 4th, 2004. He met with WISELI co-Directors and Leadership Team, as well as Associate Dean for Physical Sciences in the Graduate School, the Provost and Associate Vice Chancellor for Diversity and Climate, the Chancellor, and the Senior Vice President for Academic Affairs for the UW System. In his follow up email, Dr. Bordogna wrote: "I enjoyed being with you and your colleagues to hear first hand about the wonderful work you are doing for our country, and for humankind generally. Makes me feel upbeat and wanting to follow. Thank you for your kind hospitality and for teaching me new things."

- We were site-visited on November 8-9, 2004, by eight outside reviewers. The site visitors had an extensive schedule of presentations, and interviews with 43 individuals including the Provost, Dean of the Graduate School, Dean of Engineering, Dean of the School of Veterinary Medicine, Associate Vice Chancellor for Diversity and Climate, and Senior Vice President for Academic Affairs for the UW System. The panel reviewed our program very positively, and provided some specific suggestions for improvement.

# 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 | Provost Peter Spear | Dean Martin Cadwallader, Graduate School |
| Sr. Vice President Cora Marrett, UW System | Dean Jeanette Roberts, Pharmacy | Dean Daryl Buss, Veterinary Medicine |
| Dean Phil Farrell, Medical School | Dean Elton Aberle, College of Agricultural & Life Sciences | Assoc Dean Tim Mulcahy, Graduate School |
| Assoc Dean Terry Millar, Graduate School | Dean Robin Douthitt, School of Human Ecology | Dean Katharyn May, School of Nursing |
| Assoc. Dean Mariamne Whatley, School of Education | Don Schutt, Human Resources | Director Luis Pinero, Equity & Diversity Resource Center |

## 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

# WISELI – SUMMARY OF ACCOMPLISHMENTS, October 2004

## Introduction

The Women in Science & Engineering Leadership Institute (WISELI) is the embodiment of the NSF ADVANCE Institutional Transformation award at the University of Wisconsin-Madison. All ADVANCE activities that WISELI initiates are unified by three overarching themes and a strategy to transform the UW-Madison into a gender-equitable workplace. The themes are:

- use an ***evidence-based*** approach to drive institutional change
- foster ***behavioral change*** of people in the institution
- ensure ***sustainability*** of the transformation

In our initial proposal we wrote, "Evaluation will be a cornerstone of our Institutional Transformation at UW-Madison." Evaluation and research are woven into each initiative so that all efforts to accomplish behavioral change are fortified with that which captures the attention of scientists and engineers—data. We use the research and evaluation compiled and produced by WISELI to design interventions to reduce barriers for women. We evaluate these initiatives to improve them, thereby using an iterative approach involving design, evaluation, and redesign. Sustainability of interventions and the behavioral changes they induce are promoted by WISELI's ability as a research center to leverage campus resources and provide a highly visible focal point for activities that advance women in science and engineering.

## Research and Evaluation Activities

### Establish baseline for in-depth impact study

In the first year of our project, we developed an in-depth interview protocol and interviewed a stratified random sample of 41 women scientists and engineers, both tenure-track faculty and teaching and research academic staff. The same respondents will be re-interviewed in 2006.

- The data gathered from these interviews inform the climate surveys, ethnographic study, issue studies, evaluation of existing campus programs, design of workshops and other interventions, and evaluation of WISELI itself.
- A report of the themes revealed by the interviews is in Appendix 1.

### Develop and administer climate surveys

In 2003, we administered two campus-wide climate surveys—one for faculty and one for a 50% sample of selected academic staff. A similar survey will be repeated in 2006 and data will be matched to the responses from the 2003 survey, thus creating a longitudinal record of faculty satisfaction on a variety of measures.

- The provost funded expansion of the survey to the Social Studies and Humanities divisions.
- The survey instruments are in Appendix 2 (faculty) and Appendix 3 (staff). At least eight institutions outside the UW-Madison have adopted or adapted our survey instruments for use in their own institutions.
- We administered the faculty survey from February through May of 2003 and received a 60.3% response rate. For some preliminary findings from the faculty version, see Appendix 4. Further analyses of these data are underway, and we expect to publish many papers based on our results (for one example, see Appendix 5).
- The academic staff survey was in the field from March through June of 2003 and received a 47.6% response rate. Preliminary findings from the academic staff survey are found in Appendix 6.
- Preliminary findings have been presented to at least 20 groups of faculty, staff and administrators on campus, and at least four groups outside campus.

### Issues studies

As per our proposal, we embarked upon two "issue studies" and will identify the third study in Spring 2005.

- **Issue Study #1, "The Department Chair and Climate":** We are currently writing an article for publication based on data from interviews (Appendix 1) and the survey (Appendix 4 and Appendix 7), indicating the importance of department chairs to the success, or lack thereof, of women faculty.
- **Issue Study #2, "Why Women Leave":** Our second study will identify the reasons why women faculty in the sciences and engineering leave UW-Madison. Based on interviews with ten women (see protocol in

Appendix 8) who recently left the UW-Madison, we hope to discover novel ways to retain more women. We are coding and analyzing data from these interviews and will draft a report in February 2005.

### Discourse analysis of the "ignoring-my-ideas" phenomenon

Professor Cecilia Ford, a WISELI Leadership Team member, is pursuing research on women's participation in academic discourse. Using videotapes of various academic meetings, Dr. Ford conducts detailed discourse analysis to identify gendered difference in language usage. Her study began as an effort to understand why women often report "having their ideas ignored" in meetings and has evolved into a study of effective methods women use to get their ideas heard.

- Dr. Ford presented her preliminary work on this topic in four professional meetings, and is currently writing a book tentatively titled *Talking Change;* see Appendix 9 for an abstract.

### Ethnographic study

Associate Professor Amy Stambach, a WISELI Leadership Team member, is currently engaged in ethnographic research based on observations in two laboratories on campus in collaboration with Ramona Gunter. The laboratories were chosen based upon data supplied in the interviews with 41 women scientists and engineers, supplemented by interviews with male scientists.

- One paper from the interview data has been published (Appendix 10) and another is under review (Appendix 11). We expect publications based upon the ethnography of the laboratory settings to follow.

### Modeling predictive variables of campus climate

This work is in the exploratory phase.

- We have applied to the Graduate School for a research assistant (proposal included as Appendix 12) to assist us in our efforts to analyze our climate data more fully. This work will begin in 2005.

### Evaluate existing programs for impact and modification

Combining the baseline interviews performed in 2002 with data from the faculty survey and other sources, we are evaluating many existing programs that affect women scientists on the UW-Madison campus. Using these data sources, we have completed or are in the process of completing the following evaluation reports:

- **The Women Faculty Mentoring Program:** See Appendix 13 for the final report.
- **The Tenure Clock Extension policy:** The first draft of this evaluation report is in Appendix 14.
- **Campus Childcare:** The evaluation of Campus Childcare is in process and will be completed by the end of 2004. See Appendix 15 for a summary of the climate survey results of Childcare questions.
- **The Dual Career Couples policy:** We are collaborating with researchers from Virginia Tech to obtain additional data on faculty who have used the Dual Career Couples policy, and will supplement our baseline interview data and survey data with these new interview data. For the interview protocol that Virginia Tech researchers use, see Appendix 16. A summary of findings on the Dual Career Couples policy from the *Study of Faculty Worklife at the UW-Madison* is in Appendix 17.
- **Evaluations of Other Campus Programs:** For descriptive statistics on program satisfaction for split appointments, gender pay equity studies, Provost's climate initiative, and sexual harassment information sessions from the *Study of Faculty Worklife at the UW-Madison,* see Appendix 18.

### Research activities not included in original proposal

- **WISELI Library:** Both our research and new programs are based on existing research related to climate, women in science and engineering, institutional change, bias and stereotypes, and many other topics. We have built an extensive on-line literature database, available to the public at http://wiseli.engr.wisc.edu (see Appendix 19). This database will become part of the ADVANCE Web Portal, developed by Virginia Tech.
- **"Stages of change" model:** We apply a "stages of change" model developed by healthcare researchers to the process of institutional transformation, combining a theoretical component (Appendix 20) with quantitative testing of the theoretical model (Appendix 5).
- **Study of Career Choices in Engineering:** Professor Amy Wendt, a WISELI Leadership Team member, is studying career choices in engineering. By interviewing women dissertators, postdocs, and new assistant professors, she hopes to understand their decision-making processes in choosing an academic career path. For her interview protocol, see Appendix 21.

- **Policy Forum:** Lead author Jo Handelsman is drafting a Policy Forum piece targeted for submission to a highly visible scientific journal. It outlines the goals of the ADVANCE program and provides scientists an extensive array of policy options for improving gender equity in academic science and engineering.

## New Initiatives

### Establish WISELI

Established in January 2002, the Women in Science & Engineering Leadership Institute (WISELI) is a visible entity that centralizes all ADVANCE activity at the UW-Madison.

- WISELI became an official UW-Madison research institute in Summer 2003.

### Resource studies

We collected data about start-up and space as part of our mandated NSF indicators and reported on them in our 2003 Annual Report. We are merging lab and office space data with individual-level data on grant funding, time at institution, rank, and responses to the climate survey questions regarding satisfaction with space. We will similarly evaluate other important resources (administrative support, TAs, etc.) at a future date, relying both on survey data about resource satisfaction and institutional data.

- Preliminary results indicate that the number of grants received explains gender differences we found in lab space in three colleges (see Appendix 22).
- "Satisfaction with Resources" findings from the faculty climate survey are provided in Appendix 23.

### Study feasibility of moving outstanding academic staff into faculty positions

WISELI co-Directors Carnes and Handelsman have actively pursued five cases in which an accomplished academic staff member wished to move to a tenure-track faculty position. Their efforts and experiences will allow us to produce a "road map" for switching tracks that will identify characteristics of the ideal candidate and outline the appropriate steps to take.

- To date, two cases have been successful, both involving clinical faculty (a third clinical case is pending). The two cases involving teaching staff have presented greater challenges; one did not succeed and one is still pending. WISELI leadership will continue to pursue selected cases.

### Workshops for department chairs

This workshop series is one of WISELI's most successful projects. We use a peer-teaching model to engage department chairs in discussions of climate *in their own departments*. We survey their departments to assess the climate and provide them with a confidential report of their results. They share ideas with each other and develop plans for interventions designed to improve climate in their departments.

- We have trained or are in the process of training 15 department chairs. We have trained almost half of the Basic Science chairs in the Medical School, and almost half of the department chairs in Engineering.
- We have used department-level surveys on approximately 2,000 faculty, academic and classified staff, postdoctoral fellows, scientists, researchers and graduate students to assess climate in their departments. Response rates for the surveys average 52% (range 30% to 75%). Appendix 24 provides a status report for these workshops.
- A description of the workshops and a resource book are included in Appendix 25.

### Workshops on laboratory management

While researching the resources available for such a workshop on our campus, we discovered that the Howard Hughes Medical Institute (HHMI) is developing a program remarkably similar to what we had in mind. WISELI co-Director and HHMI Professor Jo Handelsman will contribute to HHMI's workshops in June 2005 and provide them with WISELI materials that address gender equity. Handelsman's participation in this workshop will allow us to determine how best to incorporate their materials on our campus.

### Celebrating Women in Science & Engineering Seminar Series

This initiative branched into two different programs. The first is a grant program whereby individuals can apply for small grants (up to $3,000) to enhance their own seminar schedules or especially to create new workshops, symposia, lecture series, or similar events in line with WISELI's goals. We receive contributions from five colleges (L&S, ENGR, PHARM, MED, and VETMED) to fully fund this program.

- We have awarded 20 grants, including a special set-aside to support the visit of Dr. Virginia Valian in October 2003, and have brought in 51 women speakers to 18 departments/programs in five schools/colleges. Appendix 26 lists awards made and invited speakers.
- Each grantee completes his or her own evaluation of the impact of their guest. Appendix 27 collectively summarizes these evaluations to analyze the effectiveness of the program.

The second program is the WISELI Seminar Series. Local scholars from various disciplines present research relevant to women in science and/or engineering to all interested members of the UW-Madison community.

- These seminars enhance our knowledge and understanding of various issues confronting women in science and engineering, foster discussion of these issues, provide a forum for presenting results of WISELI's research activities, and provide networking opportunities to attendees. Appendix 28 lists speakers and their topics.

### Cluster hire initiative

This is not an active initiative for two reasons: (1) no new cluster hire positions have been released since early 2002, and (2) faculty and staff gave this initiative a very low priority in our initial Town Hall Meetings.

### Women in science & engineering leadership programs and workshops

Our local workshops will provide models and a testing ground for national workshops.

### Life Cycle Research Grants

One of our most successful projects, the Life Cycle Research Grant program provides funding to faculty who experience acute crises in their personal life during critical junctures in their professional careers.

- In collaboration with the Graduate School we have awarded seven grants to 14 applicants. Our completed formative and summative evaluation of this program (see Appendix 29) shows that this program is much needed, successfully supports faculty in crisis, and helps sustain and increase professional productivity.
- We are in the process of institutionalizing this important initiative. In the short-term (through Spring 2005), the Provost's Office and the Graduate School will jointly fund the program for biological and physical science faculty only. In the long-term, we will seek funding from the Vilas Trust, the Women in Philanthropy Council, and the UW Foundation to raise an endowment that will make this program available to all faculty in need. Appendix 30 provides a sample brochure for this fundraising effort.

### Endowed professorships for women in science

The Chancellor's list of fundraising priorities for the current "Create the Future: The Wisconsin Campaign" capital campaign includes these professorships.

### Develop networks, promote communication, increase visibility of women in S & E

With WISELI as the visible center of ADVANCE activity, networking and communication are flourishing.

- WISELI maintains a listserv (250 subscribers as of October 2004) and a website (5,735 hits as of October 2004), sponsors receptions and hosts meetings with prominent visitors, maintains contact with senior women faculty, publishes the accomplishments of women faculty and academic staff prominently on its website, uses the Leadership Team members to nominate women for awards, and sends women to national WISE meetings, including the 2004 ADVANCE meeting in Atlanta.

### Time stretcher services

The UW Hospital has already developed this service. It is available to all UW-Madison faculty and staff.

### Leadership development of academic staff

When appropriate courses become available, WISELI offers professional development opportunities (including awards nominations) to academic staff. Academic staff members are always invited to all public WISELI events, and our Leadership Team includes academic staff members.

### Initiatives not included in original proposal

- **Workshops for search committee chairs:** These workshops encourage small groups of search chairs to learn from each others' experiences as they discuss topics such as running effective and efficient search committees, recruiting excellent and diverse applicants, and conducting fair and thorough evaluations of

candidates. Workshop facilitators present research on how unconscious assumptions and biases can influence evaluation and selection of candidates and provide practical advice for reducing their impact. These workshops have been expanded to include all members of search committees and administrators.
  - We produced a guidebook for search committee chairs (Appendix 31) and a brochure that summarizes research on unconscious assumptions and biases (Appendix 32). These documents, especially the brochure, are in high demand on campus and beyond, and we have provided them to at least eight different campuses and organizations outside the UW-Madison.
  - A majority of search committee chairs in CALS and Engineering and many in the Medical School have participated in these workshops. In total, we have run 13 sessions and trained 70 search chairs. Appendix 33 provides a status report for these workshops.

- **Senior women faculty initiative:** WISELI representatives used "discovery interviews" to engage 39 of 82 women full professors in biological and physical sciences at UW-Madison in a structured discussion of their career issues. We conducted these interviews in Fall 2002 through Spring 2003.
  - Notes taken at the senior women meetings were compiled into a confidential report for WISELI co-Directors and initiative leaders, producing several ideas for WISELI initiatives. This report is not publicly available. The interview questions are included in Appendix 34.
  - An unanticipated outcome of these meetings was that some women in difficult situations requested and received individual advocacy.
  - We will publish a paper discussing the format of these meetings in a special issue of the *Journal of Technology Transfer*. For an abstract for this paper, see Appendix 35.
  - Two presentations on the benefits and challenges of using this approach to reach senior women faculty have resulted from this initiative.

- **Nominations and awards for women faculty:** As a direct result of our conversations with senior women faculty, WISELI Leadership Team member Professor Patricia Brennan drafted a brochure designed to inform women of the benefits of pursuing academic awards and honors in order to enhance their careers.
  - We have distributed over 350 copies of this brochure (Appendix 36).
  - We are currently developing a web-based template other campuses can use to easily inform women about awards and other honorific opportunities available on their own campuses.
  - Leadership Team members have actively pursued nomination of women faculty and staff for awards.

- **Documentary video:** To visually document our institutional transformation, WISELI is creating a documentary video in three parts. A final video encompassing all five years of the project will be complete by the end of 2006.
  - We completed the first video in early 2004, screened it publicly at UW-Madison in March 2004, and premiered it on *The Research Channel* in June 2004. (See Appendix 37.)
  - We are currently filming a video highlighting three of our most successful initiatives. This video will be completed by January 2005.

## Administrative Structure

**Directors.** Molly Carnes and Jo Handelsman are co-Directors of WISELI. Both secured appointments in Industrial Engineering, to more fully utilize the resources of the College of Engineering (WISELI's host).
**Executive administrator.** Jennifer Sheridan (Ph.D., Sociology) was hired in February 2002 as WISELI's Research and Executive Director. She is responsible for coordination of all research and programmatic activities, including reporting activities to the NSF.
**Support staff.** To fulfill the research mission of WISELI, support staff in the first 2.5 years have been recruited by hiring graduate students rather than clerical staff. The Office of the Provost and the College of Engineering combined to provide 1.0 FTE of support staff to WISELI, to be filled in the last two years of the program. The web master was provided by cost-share from the Medical School.
**Leadership Team.** The Leadership Team (LT) meets monthly, and most LT members come to the monthly WISELI seminars as well. The structure and function of the Leadership Team has changed over time. One faculty member (Allen) and one staff member (Millar) left the Leadership Team to take on new administrative and research duties, respectively. Other members (Middlecamp, Henderson) have joined. The LT acts

primarily as an advisory board, although individual LT members are very active in particular initiatives. A formative evaluation of the Leadership Team was provided to WISELI Directors in August 2003 (confidential report, not publicly available).

**Administrative partners.** Our Administrative Partners have been invaluable allies as we bring our programs to the UW-Madison campus, and as we strategize how to disseminate our programs beyond the UW-Madison, especially to the University of Wisconsin System schools.

**Evaluation Team.** The LEAD Center underwent tremendous changes during the second year of our grant. In early 2003, to prevent recurring turnover of our evaluation staff, we hired our evaluator directly on the ADVANCE grant, rather than paying the same individual through the LEAD Center. This arrangement has been ideal for WISELI, enabling us to efficiently translate results from evaluation into action. All members of the Evaluation Team except for the originally-named lead evaluator (Dianne Bowcock) remain on the Team, which meets at least annually.

**Affiliates.** WISELI affiliates are contacted via listserv at least semi-annually with detailed reports of WISELI's accomplishments.

**External Advisory Team.** We have met with our External Advisory Team (EAT) twice to date, and more often with individual members of the team. The last meeting resulted in a summary of recommendations, which led to a commitment of resources from the Office of the Provost; the letter is attached as Appendix 38.

**Sustainability beyond the funding period.** Even before the program officially began, WISELI co-Directors initiated strategies to sustain WISELI as a center of institutional change on campus. As noted above, WISELI is an "official" research institute. This status gives legitimacy to the research WISELI conducts, provides access to resources such as capital exercises, allows WISELI to administer additional grants through the institute, and gives affiliated faculty, staff and students a visible "home" for issues related to gender equity in STEM fields. In addition, WISELI co-Directors have confirmed a commitment from the Vice Chancellor for Administration that the Executive Director's position will be funded after 2006.

**Dissemination.** As demonstrated by our numerous professional presentations, working papers, peer-reviewed publications, and abstracts of works-in-progress, we are working towards dissemination of our research and initiatives through the traditional avenues available to academics. We are also disseminating our work in many non-traditional ways:

- WISELI's year-one video was shown to a national audience via *The Research Channel.*
- We distributed our "Reviewing Applicants: Research on Biases and Assumptions" brochure to eight colleges, universities and organizations, most of them non-ADVANCE institutions.
- We distributed our survey instrument(s) to eight universities outside the UW-Madison.
- We make our workshop materials and library database available through the WISELI website and the ADVANCE Web Portal.

## Summary and Conclusion

WISELI's work on the UW-Madison campus has been both welcomed and successful. Our emphasis on research and evaluation has enabled us to approach faculty, staff and administrators with data and with evidence-based solutions to problems. As an example, one of our most popular initiatives, the Life Cycle Research Grants, is on the fast-track to becoming a permanent offering of the Provost's Office because we supplied a compelling evaluation of the pilot program to high-level administrators. Using such evidence to approach scientists and engineers on campus allows us an opening to begin to push for individual behavioral change, helping individuals understand how their own subtle unconscious biases and assumptions might influence key elements of the academic careers of non-majority faculty such as women. We emphasize this research in our Workshops for Chairs of Hiring Committees, and in our Climate Workshops for Department Chairs. Campus-wide interest in our efforts provides evidence for our success. Although our ADVANCE efforts are targeted to departments in the biological and physical sciences, campus leadership quickly recognized the value of these activities for the entire university. With material help and significant support from top university administrators we are successfully institutionalizing several efforts sooner than we expected. Due to the NSF ADVANCE program, institutional transformation is progressing rapidly at the UW-Madison.

# WISELI – SUMMARY OF ACCOMPLISHMENTS, October 2004

LIST OF APPENDICES


Appendix 1: *The Climate for Women Faculty in the Sciences and Engineering: Their Stories, Successes and Suggestions (*Pribbenow, Lottridge, & Benting, 2004).

Appendix 2: *Study of Faculty Worklife at the University of Wisconsin-Madison.*

Appendix 3: *Study of Faculty and Academic Staff Worklife at the University of Wisconsin-Madison.*

Appendix 4: "Study of Faculty Worklife at the University of Wisconsin-Madison: Preliminary Findings."

Appendix 5: *Assessing "Readiness to Embrace Diversity": An Application of the Trans-Theoretical Model of Behavioral Change* (Sheridan, Handelsman, & Carnes, 2004.

Appendix 6: "Preliminary Results from the *Study of Faculty and Academic Staff Worklife at the University of Wisconsin-Madison:* Work/Life, Satisfaction, and Departmental Climate."

Appendix 7: Preliminary Survey Results: Workplace Interactions

Appendix 8: ADVANCE/WISELI Research Study: Interview Questions

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Appendix 10: Ramona Gunter and Amy Stambach, "As Balancing Act and as Game: How Women and Men Faculty Experience the Promotion Process" *Gender Issues* 21 (2003): 24-42.

Appendix 11: Ramona Gunter and Amy Stambach, "Differences in Men and Women Scientists' Perceptions of Workplace Climate."

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Appendix 19: WISELI Library

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Appendix 20: *How Do You Make a University Stop "Smoking"? Applying the Transtheoretical Model of Behavioral Change to Faculty Diversity Issues in Academia*, Carnes, Sheridan, & Handelsman.

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Appendix 32: *Reviewing Applicants: Research on Bias and Assumptions:* Text version of brochure

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Appendix 34: AGENDA for Senior Women small group meetings

Appendix 35: *Measuring the Impact of Institutional Change on Senior Women Faculty in Science, Math and Engineering*, Brennan, Sheridan, Carnes, Handelsman, & Durand.

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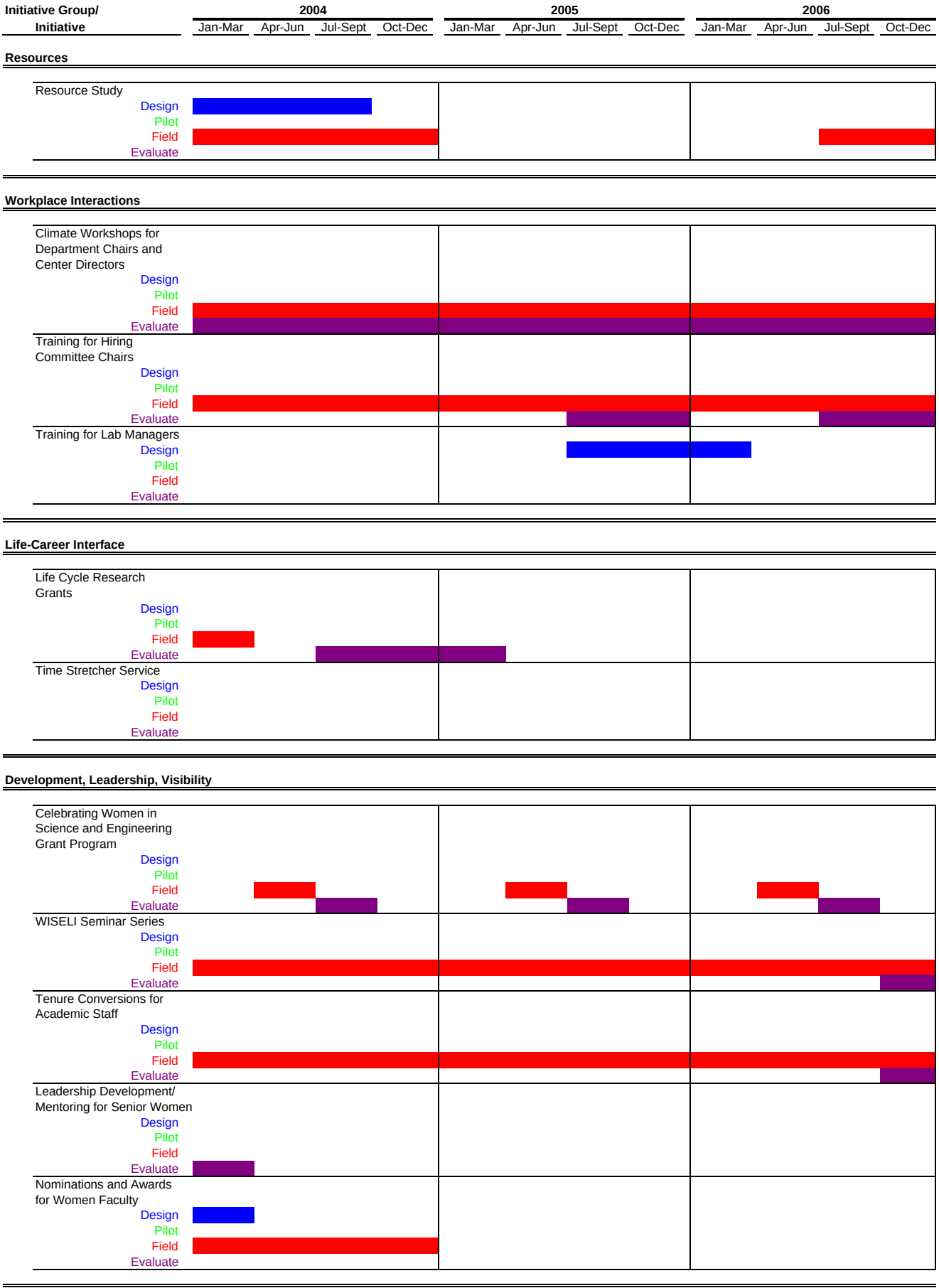
Appendix 37: Research Channel's Video Library -- Women in Science and Engineering Leadership Institute: Year One

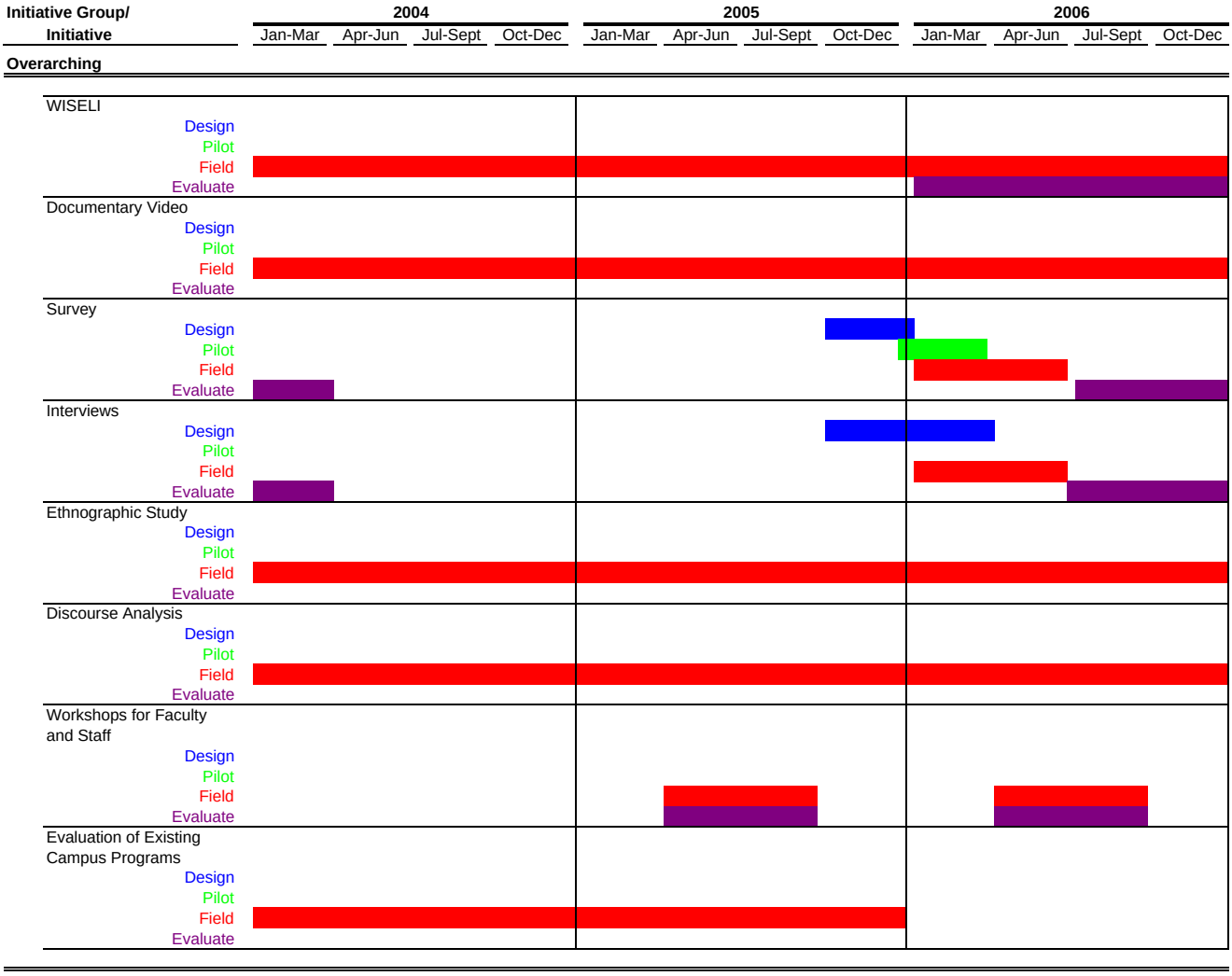
Appendix 38: June 2, 2002 Letter from External Advisory Team Members, Charlotte Kuh and Joan King.

# 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***

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Workshops for Faculty and Staff
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Evaluate
Evaluation of Existing Campus Programs
Design
Pilot
Field
Evaluate

# Papers and Presentations

# *WISELI Publications and Presentations*

**Papers Published:**

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.

Gunter, Ramona and Amy Stambach. 2003. "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." *Gender Issues*. 21(1):24-42.

**Working Papers:**

Carnes, Molly; Jo Handelsman; Jennifer Sheridan; Eve Fine. 2004. "How Do You Make a University Stop "Smoking"? Applying the Transtheoretical Model of Behavioral Change to Faculty Diversity Issues in Academia." In progress.

Pribbenow, Christine Maidl; Susan Daffinrud; and Deveny Benting. 2004. "The 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. 2004. "Assessing "Readiness to Embrace Diversity": An Application of the Trans-Theoretical Model of Behavioral Change." In progress.

Brennan, Patricia; Jennifer Sheridan; Molly Carnes; Jo Handelsman; and Bernice Durand. 2004. "Discovering Directions for Change in Higher Education Through the Experiences of Senior Women Faculty." Accepted for publication, special issue of *Journal of Technology Transfer* (Volume 31, Issue 1. Jan./Feb. 2006).

Gunter, Ramona and Amy Stambach. 2004. "Differences in Men and Women Scientists Perceptions of Workplace Climate." In progress.

Li, Jing. 2004. "Does Child Bearing Affect Women's Academic Progress at Senior Level?" In progress.

Pribbenow, Christine Maidl and Deveny Benting. 2004. "Why Women Leave." In progress.

Carnes, Molly; Stacie Geller, Eve Fine, Jennifer Sheridan, and Jo Handelsman. 2004. NIH Director's Pioneer Awards: Could the Selection Process Have Favored Men?" Under Review.

Handelsman, Jo; Nancy Cantor, Molly Carnes, Nancy Hopkins, Cora Marrett, Denice Denton, Eve Fine, Sue Rosser, Jennifer Sheridan, and Virginia Valian. 2004. "More Women in Science." In progress.

**Presentations:**

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.

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 25$^{th}$ 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.

Gunter, Ramona. October 20, 2003. "Science Faculty Talk about Self, Home, and Career." Presented at the WISELI Seminar. Madison, WI.
Sheridan, Jennifer. November 17, 2003. "Faculty Worklife at the University of Wisconsin-Madison: Preliminary Findings." Presented at the WISELI Seminar. Madison, WI.

Sheridan, Jennifer. January 12, 2004. Panelist at Virginia Tech's AdvanceVT Inaugural Workshop, "ADVANCEing Women in Academe: Voices of Experience." Roanoke, VA.
Carnes, Molly. February 13, 2004. Discussant on the "Status of STEM Female Faculty Recruitment, Retention and Advancement" panel for the "Systemic Transformations in the Role of Women in Science and Engineering" Symposium for the Annual Meeting of the American Association for the Advancement of Science meetings. Seattle, WA.

Ford, Cecilia. February 16, 2004. "Getting our Voices Heard: Patterns of Participation in University Meetings." Presented at the WISELI Seminar. Madison, WI.

Sheridan, Jennifer. February 17, 2004. "Implementing a campus climate survey: logistical notes and preliminary findings." Presented to the Center for Demography & Ecology Training Seminar. Madison, WI.

Pribbenow, Christine Maidl. March 22, 2004. "The Climate for Women Faculty in the Sciences and Engineering: Their Stories, Successes, and Suggestions." Presented at the WISELI Seminar. Madison, WI.

Sheridan, Jennifer. April 13, 2004. "Study of Academic Staff Work Life at UW-Madison: Preliminary Results." Presented at the Wisconsin Center for the Advancement of Postsecondary Education Academic Staff Institute 2004. Madison, WI.

Sheridan, Jennifer. April 20, 2004. Session Coordinator, "ADVANCE Institutional Data" panel. NSF ADVANCE National Conference. Atlanta, GA.

Carnes, Molly. April 20, 2004. Presenter, "Women from Underrepresented Groups" panel. NSF ADVANCE National Conference. Atlanta, GA.

Durand, Bernice. April 20, 2004. Session Coordinator, "Senior Women and Advancement—A Facilitated Discussion" panel. NSF ADVANCE National Conference. Atlanta, GA.

Sheridan, Jennifer. April 21, 2004. Presenter, "Campus Climate Surveys" panel. NSF ADVANCE National Conference. Atlanta, GA.

Spear, Peter. April 21, 2004. Presenter, "Sustainability of ADVANCE Programs" panel. NSF ADVANCE National Conference. Atlanta, GA.

Ford, Cecilia. May 3, 2004. ""Having our ideas ignored": CA and a Feminist Project." Presented at the American Association for Applied Linguistics Annual Conference, colloquium entitled " CA as Applied Linguistics: Crossing Boundaries of Discipline and Practice." Portland, OR.

Sheridan, Jennifer; Jo Handelsman; Molly Carnes. August 14, 2004. "Assessing "Readiness to Embrace Diversity": An Application of the Trans-Theoretical Model of Behavioral Change." Presented at the American Sociological Association meetings, session entitled "Workplace Diversity." San Francisco, CA.

Carnes, Molly. October 13, 2004. "Searching for Excellence, Equity & Diversity: Unconscious assumptions and lessons from smoking cessation." Virginia Commonwealth University. Richmond, VA.

Sheridan, Jennifer. October 14, 2004. "WISELI's Life Cycle Research Grant Program." Presented at the Society of Women Engineers National Conference, Milwaukee, WI.

Carnes, Molly. October 20, 2004. "Women in Academic Leadership: The Issues, the Goals, the Process." [to over 50 women faculty from STEM departments at UIC]; NSF ADVANCE Program at UW-Madison [approx 30 faculty, chairs, and deans from STEM departments.], Chicago, IL.

Brennan, Patricia; Molly Carnes, Bernice Durand, Jo Handelsman, and Jennifer Sheridan. November 10, 2004. "Discovering the Experiences of Senior Women in Academic Science & Engineering." Presented at the WISELI Seminar. Madison, WI.

Carnes, Molly. November 17, 2004. "The Impact of Unconscious Biases on Evaluation: Relevance to the NIH Director's Pioneer Awards." Invited presenter, Office of Research on Women's Health Roundtable discussion, NIH, Bethesda, MD.

Carnes, Molly; Jo Handelsman, Lillian Tong, and Amy Wendt. December 8, 2004. "WISELI Update—Status of Our Efforts to Promote the Advancement of Women in Science and Engineering." Presented at the WISELI Seminar. Madison, WI.

Peercy, Paul. December 13, 2004. "NSF ADVANCE Institutional Transformation Award at UW-Madison." Presented at the NSF ADVANCE Engineering Workshop, Washington DC.

**Products Available to the Public:**

"Study of Faculty Worklife at the University of Wisconsin-Madison." Climate survey instrument.

"Study of Faculty and Academic Staff Worklife at the University of Wisconsin-Madison." Climate survey instrument.

"Enhancing Department Climate: A Chair's Role. Resources." Available online at: http://wiseli.engr.wisc.edu/initiatives/climate/ALSWorkshop_Resources.doc .

"Searching for Excellence and Diversity: A Guide for Faculty Search Committee Chairs."
"Reviewing Applicants: Research on Bias and Assumptions." Brochure available online at: http://wiseli.engr.wisc.edu/initiatives/hiring/Bias.pdf , and also available in large quantities for 25¢/brochure plus mailing costs by contacting wiseli@engr.wisc.edu.

"Advancing Your Career through Awards and Recognitions: A Guide for Women Faculty in the Sciences & Engineering." Brochure available in large quantities for 50¢/brochure plus mailing costs by contacting wiseli@engr.wisc.edu.

"Women in Science and Engineering Leadership Institute: Year One." Documentary Video, first in series of three. Available online through The Research Channel: http://www.researchchannel.com/program/displayevent.asp?rid=2217 .

**Evaluation Reports:**

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

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."

Pribbenow, Christine Maidl and Deveny Benting. June 9, 2004 (revised September 23, 2004.) "WISELI's Life Cycle Research Grant Program: Formative and Summative Evaluation."

Sheridan, Jennifer; Deveny Benting; and Christine Maidl Pribbenow. July 27, 2004. "Evaluation of the Women Faculty Mentoring Program at the University of Wisconsin-Madison."

Sheridan, Jennifer and Deveny Benting. October 29, 2004. "Evaluation of the Tenure Clock Extension Policy at the University of Wisconsin-Madison."

Winchell, Jessica. October 2004. "Celebrating Women in Science & Engineering Grant Program, 2002-2004. Interim Evaluation Report."

**Presentations of WISELI Activities to Campus Groups**

**Deans' Council**—9/4/2002, 12/10/2003
**CALS Department Chairs and Deans**—10/28/2002, 1/26/2004
**ENGR Department Chairs and Deans**—11/6/2002, 2/4/2004
**Medical School Clinical Science Chairs**—10/14/2002, 3/9/2004
**Medical School Basic Science Chairs**—10/8/2002
**Pharmacy Division Heads and Deans**—4/12/2004
**SVM Department Chairs and Deans**—12/17/2002, 2/5/2004
**L&S Natural Science Chairs**—11/18/2002, 9/20/2004
**SoHE Department Chairs and Deans**—2/23/2004
**Education Department Chairs and Deans**—3/3/2004
**Biological Science Deans**—12/16/2003
**Graduate School Deans**—9/30/2004
**Other Groups:**
- **Department of Plant Pathology**—12/4/2002
- **Women in Physical Sciences**—5/2003, 2/23/2004
- **Women in Engineering**—3/18/2004
- **University League**—11/24/2003
- **College of Engineering (CoE) Academic Affairs**—11/21/2003
- **CoE Equity & Diversity Committee**—4/14/2004
- **CoE Committee on Academic Staff Issues**—4/28/2004
- **Committee on Women in the University**—2/18/2004
- **Women Faculty Mentoring Program**—9/19/2003
- **Plan 2008 Campus Resource Fair**—5/7/2002
- **Showcase 2002**—4/3/2002
- **Showcase 2004**—4/5/2004
- **Academic Staff Executive Council**—3/6/2003, 3/5/2004
- **WISELI Seminar**—10/20/2003, 11/17/2003, 2/16/2004, 3/22/2004, 11/10/2004, 12/8/2004

# NSF Informational Handout

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

Program: **ADVANCE Institutional Transformation**
Funding Agency: National Science Foundation
NSF Program Officer: Alice Hogan (ahogan@nsf.gov)
Funding Level: $750,000/year for 2002 - 2006

**Objective**

NSF ADVANCE at the University of Wisconsin-Madison is a five-year project to promote institutional transformation in science and engineering fields by increasing the participation, success and leadership of women faculty in academic science and engineering. The grant is administered through the **Women in Science & Engineering Leadership Institute (WISELI)**.

**Constituents**

Science and engineering faculty and staff in the **six schools** with the largest science and engineering faculty: College of Engineering, College of Letters & Sciences, College of Agricultural and Life Sciences, the School of Veterinary Medicine, the School of Pharmacy, and the Medical School. In total, we target **over 50 departments and 1200 faculty** in the biological and physical sciences.

**Activities**

With a strong evaluation component in all that we do. our research and initiatives feed back to each other, improving our activities with each iteration.


**Grant Programs**
- Life Cycle Research Grant Program
- Celebrating Women in Science & Engineering Grants

**Workshops**
- Workshops for Search Committee Chairs
- Climate Workshops for Department Chairs
- Workshops on Building Effective Research Teams (in development)

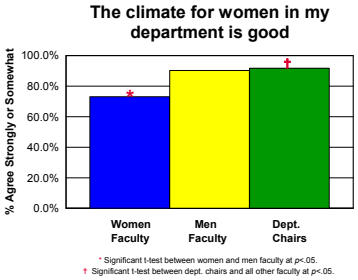
**Other Initiatives**
- Conversion of staff to tenure track
- Awards and honors for women faculty
- Leadership development for academic staff
- Conversations with senior women faculty
- Documentary video
- WISELI Seminar series
- WISELI website, listserv

**Evaluative Research**
- Interviews with women faculty and staff
- Study of Faculty and Academic Staff Worklife (climate survey)
- Resource studies
- Issue Studies
- Evaluation of existing programs at UW-Madison

**Other Research**
- Discourse analysis of women's communication strategies
- Ethnographic study of gendered interactions in the laboratory setting
- Study of Career Choices in Engineering
- Expanding Entrepreneurial Activity for Senior Women

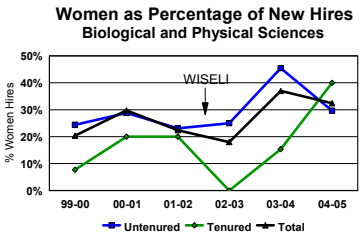
**Results**

***Climate:***




- Climate survey and interviews with women faculty identify DEPARTMENT CHAIRS as key influences on the experiences of women faculty.
- To date, sixteen department chairs participated in our Climate Workshops; the improvements made as a result of this will affect thousands of faculty and staff in those departments.
- Climate will be re-assessed in 2006 to evaluate overall effects of Climate Workshops for Dept. Chairs.

***Hiring:***




- New faculty hires increased from 22% women prior to WISELI, to 32% in the 2004 hiring cycle.
- To date, approximately 70 hiring committee chairs have participated in our training workshops.
- Evaluation of composition of hiring pools is underway.

**Principal Investigators**

Molly Carnes, Jean Manchester Biddick Professor of Medicine
Email: mlcarnes@wisc.edu
Phone: (608) 267-5566

Jo Handelsman, Howard Hughes Medical Institute Professor of Plant Pathology
Email: joh@plantpath.wisc.edu
Phone: (608)263-8783

**Executive & Research Director**

Jennifer Sheridan (sheridan@engr.wisc.edu)

**Evaluation Director**

Christine Maidl Pribbenow (cmpribben@wisc.edu)

**Program Staff**

Researcher and Workshop Developer: Eve Fine (efine@wisc.edu)
Research and Evaluation Specialist: Deveny Benting (dbenting@wisc.edu)
Grants Specialist: Carol Sobek (csobek@engr.wisc.edu)

**National-Level Overview**

Nine institutions of 76 applicants awarded grants in "first round" (2001/02):

Hunter College, City University of New York
Georgia Institute of Technology
New Mexico State University
University of California-Irvine
University of Colorado, Boulder
University of Michigan
University of Puerto Rico-Humacao
University of Washington
University of Wisconsin, Madison

Ten institutions of 72 applicants awarded grants in "second round" (2003/04):

Case Western Reserve University
Columbia University
University of Alabama, Birmingham
Kansas State University
University of Maryland-Baltimore County
University of Montana
University of Rhode Island
University of Texas at El Paso
Utah State University
Virginia Polytechnic Institute

**Contact Information**

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Fax: (608) 265-5290

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2640 Engineering Hall
1415 Engineering Drive
Madison, WI 53706

***ADVANCE institutions will serve as exemplars for other colleges and universities aiming to increase the participation and status of women in science and engineering faculty.***


# Annual Report of ADVANCE Program for University of Wisconsin-Madison

# 2004

**Principals, *University of Wisconsin-Madison***

**Dr. Molly Carnes, Jean Manchester Biddick Professor of Medicine**
**Dr. Jo Handelsman, Howard Hughes Medical Institute Professor of Plant Pathology**
**Dr. Jennifer Sheridan, WISELI**

December, 2004

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# *I. Executive Summary: Major Accomplishments in Year 3*

"'They are holding the conversation' on a campus where there has been silence on gender issues.[1]" This assessment, from the report of our site visit review in November 2004, indicates the important qualitative success that the Women in Science & Engineering Leadership Institute (WISELI) has had in engaging faculty, staff and administrators in discussions of gender equity at the UW-Madison. It is the ability to have such conversations that underlies the more quantifiable successes we highlight in this Annual Report.

During the past year, WISELI has continued the important work begun in years one and two. We have implemented the two workshop series we designed; we have communicated our research findings with multiple audiences; we have produced guidebooks, brochures, and a documentary video that have had national visibility; we have provided grants to faculty and staff to increase both the visibility and the advancement of women in the sciences and engineering on campus; and we have continued to collaborate with other active and successful diversity efforts both on campus and off.

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

## Workshops

- We continued implementing workshops for chairs of search committees. We designed multiple formats for use in training chairs of hiring committees and have broadened the training to include other faculty and staff, training over 70 individuals this year.
- We implemented an innovative workshop series for department chairs to improve climate. The discovery-based approach used in these workshops has reached 15 chairs, and over 2,000 department members have taken part in the workshops' climate surveys.
- The Office of the Provost invited WISELI input and presentation to their all-day training workshop for new department chairs (August 2004).

## Grants

- We awarded seven new Celebrating Women in Science & Engineering grants.
- In partnership with the Graduate School and the Office of the Provost, WISELI: (1) provided funding for 6 more faculty members at vulnerable junctures in their research through the Life Cycle Research Grant initiative; and (2) is developing a

[1] Fouke, Janie; Robert Drago; Elizabeth Higgenbotham, Catherine Mavriplis, JoAnn Moody, Susan Fitzpatrick, Lloyd Douglas, and Alice Hogan. 2004. "ADVANCE Program Site Visit Report: The University of Wisconsin at Madison. November 7-9, 2004."

strategy to permanently fund the Life Cycle Research Grant program for all UW-Madison faculty.

## Research & Evaluation

- An overview of findings from the in-depth interviews with 26 women faculty in the biological and physical sciences was presented to the public at the March 22, 2004 WISELI Seminar.
- We continued analyses of campus-wide surveys of climate for faculty and staff and reported results to over 20 groups on campus, including department chairs, committees, departmental seminars, and informal groups of women faculty. We have also presented survey results in at least four venues outside the UW-Madison.
- We have combined in-depth interview data with faculty survey data to produce:
    - three evaluation reports of existing campus programs (Women Faculty Mentoring Program, Tenure Clock Extension Policy, and Campus Childcare); and
    - an issue study (draft) outlining the importance of the department chair in creating the climate for women faculty.
- Ten women faculty who left the University from 2000 to 2004 have been interviewed for an issue study of "Why Women Leave." Analysis of these data will proceed in early 2005.
- A paper outlining the process of interviewing senior women faculty has been accepted for a special issue of the *Journal of Technology Transfer*.
- An ethnographic study of men and women faculty in science and engineering is continuing.
- Analysis of men's and women's conversation in naturally-occurring academic meetings is ongoing, and a book proposal has been developed to publish the study once complete.

## Leadership

- WISELI Leadership Team members continue to occupy key positions that have influence over gender-related policy and practice: Gary Sandefur, Dean of the College of Letters & Sciences; Molly Carnes, University Committee; Amy Wendt, Physical Sciences Research Committee (Graduate School).
- WISELI's co-Directors have leveraged resources from the Office of the Provost for administrative help for WISELI personnel, and from the Office of the Provost and the Graduate School for continued implementation of the Life Cycle Research Grant program.
- WISELI leaders continue to provide guidance, coaching, and mentorship to individual women students, faculty, and staff. Such activities have contributed to success in grant funding, conversion to tenure track, departmental re-assignment,

tenure achievement, and less-quantifiable outcomes of improved satisfaction with professional life.

- The WISELI Seminars, held three times per semester, continue to attract a large audience (30-40 attendees) from multiple departments and schools.
- WISELI has collaborated with the Diversity Affairs Office in the College of Engineering to: (1) develop a Louis Stokes Alliance for Minority Participation program focusing on increasing the diversity in the academic pipeline in science and engineering (awarded November 2004); and (2) submit a proposal to NSF for an Alliance for Graduate Education and the Professoriate (under review).

## Other

- The WISELI Year One video was publicly screened in February 2004. This documentary video is currently in rotation on *The Research Channel*, making it available to a national audience. During 2004, we completed filming for the next video, to be edited and screened in Spring 2005.
- The WISELI Seminars, held three times per semester, continue to attract a large audience (30-40 attendees) from multiple departments and schools.
- WISELI has collaborated with the Diversity Affairs Office in the College of Engineering to: (1) develop a Louis Stokes Alliance for Minority Participation program focusing on increasing the diversity in the academic pipeline in science and engineering (awarded November 2004); and (2) submit a proposal to NSF for an Alliance for Graduate Education and the Professoriate (under review).

In addition to these concrete programmatic elements, we have engaged in a process of self-examination during this past year that has resulted in additional resources and enhancements to our research and initiatives.

- Detailed justifications for some of our decisions (requested after our 2003 Annual Report was submitted) helped us articulate and make explicit some of our operating assumptions.
- Our External Advisory Team visited campus on June 2nd, 2004. They met with WISELI co-Directors and Leadership Team, as well as the Provost and Associate Vice Chancellor for Diversity and Climate. After the visit they provided a review of our program and recommendations. This letter helped us leverage administrative support from the Office of the Provost.
- Dr. Joseph Bordogna, NSF Deputy Director, visited campus on June 4th, 2004. He met with WISELI co-Directors and Leadership Team, as well as Associate Dean for Physical Sciences in the Graduate School, the Provost and Associate Vice Chancellor for Diversity and Climate, the Chancellor, and the Senior Vice President for Academic Affairs for the UW System. In his follow up email, Dr. Bordogna wrote: "I enjoyed being with you and your colleagues to hear first hand about the wonderful work you are doing for our country, and for humankind generally. Makes me feel upbeat and wanting to follow. Thank you for your kind hospitality and for teaching me new things."

- We were site-visited on November 8-9, 2004, by eight outside reviewers. The site visitors had an extensive schedule of presentations, and interviews with 43 individuals including the Provost, Dean of the Graduate School, Dean of Engineering, Dean of the School of Veterinary Medicine, Associate Vice Chancellor for Diversity and Climate, and Senior Vice President for Academic Affairs for the UW System. The panel reviewed our program very positively, and provided some specific suggestions for improvement.

# *II. Activities: Status of WISELI Initiatives*

## A. Workplace Interactions

### Climate Workshops for Department Chairs

- We have trained or are in the process of training 15 department chairs. We have had especially good representation from the Medical School (trained 6 of 11 Basic Science chairs) and the College of Engineering (trained 4 of 9 department chairs.)
- We have administered electronic surveys to approximately 2,000 faculty, academic and classified staff, postdoctoral fellows, scientists, researchers and graduate students to assess climate in their departments. Response rates for these surveys average 52% (range 30% to 75%).
- A description of the workshops and a resource book are available publicly on the WISELI website.
- A document entitled "Benefits and Challenges of Diversity," written especially for this audience, will be produced as a separate brochure that will be available for distribution in 2005.

### Workshops for Search Committee Chairs

- A majority of search committee chairs in CALS and Engineering and many in the Medical School have participated in these workshops. In total, we have run 13 sessions and trained 70 search chairs and committee members.
- We have developed three different "modes" for delivering material to chairs of hiring committees:
    - A 3-session workshop facilitating small-group discussion and peer learning, with each session timed according to critical points in the search process (before the deadline, reviewing applicants, before the interviews.)
    - A 1-session discussion session with a small group of chairs to facilitate small-group discussion and peer learning, with one session covering all of the material in our guidebook.
    - A 1-session formal workshop with carefully chosen presenters from the College or organization in which it occurs, to lend authority to the messages. Smaller-group discussion is facilitated by seating participants at round tables and providing them problems to discuss cooperatively. These workshops are open to all members of search committees, and also departmental administrators who assist with faculty searches.
- We produced a guidebook for search committee chairs and a brochure that summarizes research on unconscious assumptions and biases. These documents, especially the brochure, are in high demand on campus and beyond, and we have provided them to at least nine different campuses and organizations outside the UW-Madison. Over 3,500 copies of the brochure have been distributed at UW-Madison and beyond.

- Requests for our materials and training have been received from the UW System and the UW Extension colleges. Plans for disseminating our workshops and materials to UW System campuses in 2005 is underway.

### Workshops in Building Effective Research Teams

- While researching the resources available for such a workshop on our campus, we discovered that the Howard Hughes Medical Institute (HHMI) is developing a program remarkably similar to what we had in mind. WISELI co-Director and HHMI Professor Jo Handelsman will contribute to HHMI's workshops in June 2005 and provide them with WISELI materials that address gender equity. Handelsman's participation in this workshop will allow us to determine how best to incorporate their materials on our campus.

## B. Life-Career Interface

### Life Cycle Grants

- In collaboration with the Graduate School and the Office of the Provost, we have awarded ten grants to 20 applicants.
- Our completed formative and summative evaluation of this program shows that this program is much needed, successfully supports faculty in crisis, and helps sustain and increase professional productivity.
- We are in the process of institutionalizing this important initiative. In the short-term (through Spring 2005), the Provost's Office and the Graduate School will jointly fund the program for biological and physical science faculty only. In the long-term, we will seek funding from the Vilas Trust, the Women in Philanthropy Council, and the UW Foundation to raise an endowment that will make this program available to any qualified faculty in need. We have produced a sample brochure for this fundraising effort.

### Time-Stretcher Services

- The UW Hospital has already developed this service. It is available to all UW-Madison faculty and staff.

### Lactation Space

- WISELI Leadership Team members Amy Wendt and Vicki Bier were instrumental in securing space for a lactation room in Engineering Hall (later to be moved to the planned renovation of the nearby Mechanical Engineering Building.)

## C. Development, Leadership, Visibility

### Celebrating Women and Science and Engineering Grants

- Since 2002, we have awarded 21 grants, and have brought in 51 women speakers to 18 departments/programs in five schools/colleges.
- Each grantee completes his or her own evaluation of the impact of their guest. These individual reports have been collectively summarized to analyze the effectiveness of the program. This report suggests that the program has been successful in:
    - Reaching a "wide" population (many different departments, large attendance at sponsored events, variety of audiences including undergraduate and graduate students, postdocs, academic staff, and men and women faculty.)
    - Reaching "deeply" into a department with special one-on-one meetings for graduate students and assistant professors that provide mentoring and networking opportunities that did not exist previously.
    - Providing interesting, encouraging, inspirational, and informative speakers to a department or group.
    - Supporting women in a variety of ways, including: providing a role model, addressing career/family concerns, speaking to climate challenges women face in science and engineering; suggesting alternative career paths, providing research support, leadership and networking opportunities, and mentoring.

    The report suggests that WISELI might help more with publicizing the speakers brought in through the Celebrating Women in S&E program, especially for student groups.

- The next call for proposals will go out in late spring, 2005, for the 2005/06 academic year.

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

- WISELI co-Directors Carnes and Handelsman have actively pursued five cases in which an accomplished academic staff member wished to move to a tenure-track faculty position. Their efforts and experiences will allow us to produce a "road map" for switching tracks that will identify characteristics of the ideal candidate and outline the appropriate steps to take.
- To date, two cases have been successful, both involving clinical faculty (a third clinical case is pending). We have started working on a case involving a research staff member. The two cases involving teaching staff have presented greater challenges; one did not succeed and one is still pending. WISELI leadership will continue to pursue selected cases.

## Senior Women Faculty Initiative

- We will publish a paper discussing the format of these meetings in a special issue of the *Journal of Technology Transfer* in 2005.
- Two presentations on the benefits and challenges of using this approach to reach senior women faculty have resulted from this initiative.
- Next directions for this initiative include a possible study on senior women faculty and their motivations for (and against) entrepreneurship.

## Develop networks, promote communication, increase visibility of women in S & E

- With WISELI as the visible center of ADVANCE activity, networking and communication are flourishing. WISELI maintains a listserv and a website, sponsors receptions and hosts meetings with prominent visitors, maintains contact with senior women faculty, publishes the accomplishments of women faculty and academic staff prominently on its website, uses the Leadership Team members to nominate women for awards, and sends women to national WISE meetings, including the 2004 ADVANCE meeting in Atlanta.

## Cluster hire initiative

- This is not an active initiative for two reasons: (1) no new cluster hire positions have been released since early 2002, and (2) faculty and staff gave this initiative a very low priority in our initial Town Hall Meetings.

## Nominations and Awards for Women Faculty

- As a direct result of our conversations with senior women faculty, WISELI Leadership Team member Professor Patricia Brennan drafted a brochure designed to inform women of the benefits of pursuing academic awards and honors in order to enhance their careers. We have distributed over 350 copies of this brochure.
- We are currently developing a web-based template other campuses can use to easily inform women about awards and other honorific opportunities available on their own campuses.
- Leadership Team members have actively pursued nomination of women faculty and staff for awards.
- In exchange for an acknowledgement of WISELI and the National Science Foundation ADVANCE program, we have given all of our work in this area, including a database with over 180 national awards for science & engineering scholarship and leadership as well as our brochure, to the Association for Women in Science (AWIS), which is developing a systematic way to nominate women for important national awards.

## Endowed Professorships for Women in Science

- The Chancellor's list of fundraising priorities for the current "Create the Future: The Wisconsin Campaign" capital campaign includes these professorships.

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

- When appropriate courses become available, WISELI offers professional development opportunities (including awards nominations) to academic staff. In 2004, we sent at least 11 academic staff members to various workshops and mini-courses.
- Academic staff members are always invited to all public WISELI events, and our Leadership Team includes academic staff members.

## D. Overarching

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

Established in January 2002, the Women in Science & Engineering Leadership Institute (WISELI) is a visible entity that centralizes all ADVANCE activity at the UW-Madison. WISELI became an official UW-Madison research institute in Summer 2003.

- ***Leadership.*** Co-PIs Molly Carnes and Jo Handelsman continue to co-Direct WISELI. Handelsman remains at 30% effort on the project, and Carnes has reduced her effort to 40%. Jennifer Sheridan remains as WISELI's Executive and Research Director.
- ***WISELI Seminar.*** The WISELI seminar series has remained popular, with between 30 and 40 attendees from multiple departments and schools for each seminar, on average. In 2004 the following speakers presented their work at the seminar:
  - Cecilia Ford, Professor, Department of English**.** **"**Getting our Voices Heard: Patterns of Participation in University Meetings."
  - Christine Maidl Pribbenow, WISELI Director of Evaluation. "The Climate for Women Faculty in the Sciences and Engineering: Their Stories, Successes, and Suggestions."
  - Virginia Sapiro, Associate Vice Chancellor for Teaching and Learning and Professor, Dept. of Political Science. "Through a Glass Ceiling Darkly: The Political Psychology of Not Getting to the Top."
  - Margaret Harrigan, Senior Policy Analyst, Office of Academic Planning & Analysis. "The Impact of Strategic Funding on Hiring Minority and Women Science Faculty at UW-Madison."
  - Patricia Brennan, Professor of Industrial Engineering and Nursing. "Discovering the Experiences of Senior Women in Academic Science & Engineering."
  - Molly Carnes, Jo Handelsman, Lillian Tong, and Amy Wendt. WISELI co-Directors and Leadership Team Members. "WISELI Update—Status of Our Efforts to Promote the Advancement of Women in Science and Engineering."
- ***WISELI Website.*** In 2004, 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 6,400 hits as of the end of 2004.

- ***WISELI Library.*** An important element of our website, our online "library" includes hundreds of annotated references to the social science literature underpinning our approach to gender equity. This library has become an important resource for both UW-Madison researchers, and others. We are investigating ways to make it available to a wider audience through the Virginia Tech ADVANCE Web Portal.
- ***WISELI Listserv.*** The WISELI listserv has become a reliable way to communicate with our affiliates. Other organizations (e.g., the Provost's Office, the Wisconsin Women in Higher Education Leadership, 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, 2004, we have 253 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 (see section VIII.) In 2004, we made 14 presentations to groups outside of the UW-Madison, and over 22 presentations within the UW-Madison community (both formal and informal.)

  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.

  (1) Our "Research on Bias and Assumptions" brochure has generated a great deal of interest in our work. Some of the organizations we have worked with in 2004 include both ADVANCE sites (University of Texas at El Paso, Virginia Tech, University of Montana, New Mexico State University, University of Nebraska-Lincoln, and the University of Washington, for example) as well as non-ADVANCE institutions such as Clarkson University, the Northeast Consortium for Faculty Diversity, the Howard Hughes Medical Institute, The University of Alaska, the University of Wisconsin Colleges, New York University, and more. In total, we have given our materials and/or advice to at least 29 institutions (14 of which are ADVANCE institutions.)

  (2) WISELI co-PIs Molly Carnes and Jo Handelsman regularly give talks on gender equity around the country. Some of the institutions to which they have spoken in 2004 include: HHMI, MIT, Harvard, University of Georgia, Georgia Tech, University of Minnesota, Virginia Commonwealth University, the University of Illinois at Chicago, the NIH Women's Health Roundtable for

the Office of Research on Women's Health[2], the annual meeting of the Directors of the DHHS designated National Centers of Excellence in Women's Health, and the NIH Roadmap Workshop on Multidisciplinary Clinical Research Training.

## Documentary Video

- We completed the first video in early 2004, screened it publicly at UW-Madison in March 2004, and it premiered on *The Research Channel* in June 2004 (**http://www.researchchannel.com/program/displayevent.asp?rid=2217** .) Including the video on *The Research Channel* has given us national exposure to our project.
- We are currently filming a video highlighting three of our most successful initiatives. This video will be completed and publicly screened in Spring 2005.
- We plan one more video highlighting evaluation and institutionalization of our projects, and from these three videos one single piece documenting the entire 5-year project will be created (2006).

## Evaluation/Research

- ***Study of Faculty & Academic Staff Worklife at the University of Wisconsin-Madison.***
  - Preliminary findings have been presented to at least 20 groups of faculty, staff and administrators on campus, and at least four groups outside campus.
  - Upon request of the Provost, faculty survey data was used to estimate the number of children born to/adopted by faculty each year, in order to estimate financial impact of a parental leave policy for faculty.
  - Upon request from the College of Engineering Committee for Academic Staff Issues (CASI), detailed tabulations and a special report of academic staff in the College of Engineering was written. The CASI has used the findings to help set their agenda for 2004/05.
  - Upon request from the College of Agricultural and Life Sciences (CALS) CASI, detailed tabulations of time allocation for CALS academic staff were provided, as part of their participation in a Sloan project (Louise Root-Robbins from UW System and Bernice Durand from UW-Madison are the Sloan PIs.)
  - Four research papers using data are underway:
    - Analysis of departmental "stage of change", using the *Diversity Issues at UW-Madison* items;
    - Event history analysis of gender differences in time to promotion to full professor, taking into account childbearing patterns of male and female faculty (*Balancing Personal and Professional Life* items);
    - Issue study combining "Climate" items with qualitative data from in-depth interviews to show the importance of the department chair as a critical determinant of the climate experienced by women faculty; and

[2] Our participation resulted in the inclusion of gender equity as it impacts the career of women scientists in the Office's 2005 priority areas for research.

        - Analysis of the differential self-reported health of faculty by gender and race/ethnicity, and the possible effects of departmental climate on self-reported health of faculty.
    - Data have been used in three evaluations of existing campus programs (Women Faculty Mentoring Program, Tenure Clock Extensions, and Campus Childcare.) In 2005, data will be used to inform evaluations of Dual Career Couples program, Split Appointments, Gender Pay Equity Studies, and the Sexual Harassment Information Sessions.
    - Space (office and lab square footage) and grant funding has been added to the longitudinal database for three colleges (VetMed, Engr, and CALS.) Tenure date, age, and promotion date (to full) added for all faculty.
    - A shorter version of the faculty survey will be repeated in early 2006. The academic staff will probably not be re-surveyed (due to the disappointingly low response rate for staff.)
- ***Interviews with UW-Madison women in science & engineering.***
    - Results from analysis of interviews presented to the public in March, 2004 at the WISELI Seminar.
    - Data have been used in three evaluations of existing campus programs (Women Faculty Mentoring Program, Tenure Clock Extensions, and Campus Childcare.) In 2005, data will be used to inform evaluations of Dual Career Couples program, Gender Pay Equity Studies, and the Sexual Harassment Information Sessions.
    - Issue study underway, combining "Climate" items with quantitative data from climate surveys to show the importance of the department chair as a critical determinant of the climate experienced by women faculty.
    - Working paper, "The Culture and Climate for Women Faculty in the Sciences and Engineering: Their Stories, Successes, and Suggestions" is available.
- ***Issue Studies.***
    - Issue Study #1, "The Department Chair and Climate": We are currently writing an article for publication based on data from interviews and the survey, indicating the importance of department chairs to the success, or lack thereof, of women faculty.
    - Issue Study #2, "Why Women Leave": Our second study will identify the reasons why women faculty in the sciences and engineering leave UW-Madison. Based on interviews with ten women who recently left the UW-Madison, we hope to discover novel ways to retain more women. We are coding and analyzing data from these interviews and will draft a report in February 2005.
    - Issue Study #3, to be identified in Spring 2005.
- ***Ethnographic Study.***
    - Working paper under review, "Differences in Men and Women Scientists Perceptions of Workplace Climate."
    - Lab observations continuing.
- ***Discourse Analysis of the "Ignoring-my-ideas" Phenomenon.***
    - Analysis of videotaped meetings is underway. This analysis will be supplemented with interview data of some meeting participants.

- "Getting our Voices Heard: Patterns of Participation in University Meetings." Presented at the WISELI seminar in February, 2004.
- ""Having our ideas ignored": CA and a Feminist Project." Presented at the American Association for Applied Linguistics Annual Conference in May 2004.
- Book proposal for *Talking Change* under review.

- ***Study of Career Choices in Engineering.*** Interviews underway. Draft of paper expected by late 2005.
- ***Examine the patterns of assigning institutional resources for uneven distribution by gender.***
  - Data on office and lab space collected in 2003 has been merged with data on grant funding, time at institution, rank, and responses to climate survey regarding satisfaction with space.
    - Preliminary results indicate that the number and dollar amounts of grants received explains gender differences we found in lab space in three colleges.
  - We will similarly evaluate other important resources (administrative support, TAs, etc.) at a future date, relying both on survey data about resource satisfaction and institutional data
- ***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 2006.
4. *Dual Career Couples*. We are collaborating with researchers from Virginia Tech on an inter-institutional study of Dual Career Couples. We have provided Virginia Tech with the names of 15 faculty members who participated on our program. We will receive the transcripts from these interviews in 2005, and combine them with interview and survey data to complete our review of the Dual Career Couples program at UW-Madison. Expected completion 2005.
5. *Tenure Clock Extensions*. We used survey and interview data to assess the success of this policy. Completed October 2004.
6. *Campus Childcare*. Evaluation of campus childcare using data from our interviews and surveys is nearly complete, and will be available in January 2005.

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 no longer plan to evaluate the Women in Science and Engineering Residential Program, as they undertook their own evaluation in 2003.
9. *Women Faculty Mentoring Program*. We used survey and interview data to assess the success of this program, and reported the results back to the executive committee of the Women Faculty Mentoring Program. Completed July 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

- We have begun negotiations with two units within the UW System to "export" our training for hiring committee chairs to their organizations. Working with these units, as well as training additional UW Madison faculty and staff to run these workshops, may lead to a "training the facilitators" workshop in 2005.
- Given several recent episodes where opportunities to highlight the accomplishments of women scientists were missed or materials were produced that conveyed an inhospitable message, WISELI is planning to convene a meeting with the media representatives from the schools and colleges and from the University Communications office to do a training workshop adapted from our hiring workshops.

# *III. 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. We have trained 70 hiring committee chairs and members, and 15 department chairs.
- 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.
- 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. Three programs have been evaluated (Women Faculty Mentoring Program, Tenure Clock Extensions, and Campus Childcare), with others to follow in 2005/06. 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 2004, 40% of the new hires in the College were women.
- Additional grants. WISELI collaborated with the Provost, the Dean of the Graduate School, 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 two grants designed to diversify the science and engineering workforce in the U.S. The first, an NSF Louis Stokes Alliance for Minority Participation (LSAMP) grant, was successful and began in November 2004. The second, an Alliance for Graduate Education and the Professoriate, was submitted in July 2004 and is still pending. WISELI's investments in helping the UW-Madison secure these grants is strategic for diversifying the pipeline of women in the sciences and engineering. Furthermore, collaboration among these programs enhances the mission of each; gender is strongly integrated in the diversity mission of the AMP and AGEP programs, and diversity is strongly integrated in the gender mission of WISELI.
- Movement on tenure-line conversion. WISELI continues to work with interested academic staff who wish to convert their appointments to the tenure track. To date, we have been successful with two clinical faculty members who made this conversion; we have been unsuccessful with staff outside of the Medical School, although we still have three cases in process. We continue to pursue these conversions on a case-by-case basis.
- 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 Provosts' programs. 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. WISELI also contributed to the feasibility study of a faculty parental leave policy, and has been invited to participate in the Provost's Human Resources Working Group.

## 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. We have been successful at using this social science research to "hold[ing] the conversation' on a campus where there has been silence on gender issues."
- 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. However, note that within WISELI's tenure, the deans of Pharmacy, Letters & Sciences, CALS, and the Medical School will all be replaced, and WISELI has or will have an impact in the choice of all four replacements.

## 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 qualities.
  - Associate Vice Chancellor for Diversity & Climate Bernice Durand.
  - University Committee member Patti Brennan.
  - Biological Sciences Divisional Vice Chair Caitilyn Allen.
  - University Committee member Molly Carnes.
  - Physical Sciences Research Committee (Graduate School) member Amy Wendt.
  - Committee on Honorary Degrees Chair Jo Handelsman.

## Contributions to gender equity programs nationally

- Survey. Campuses continue to request our survey (e.g., Virginia Tech, Syracuse, University of Alaska, and University of Montana.)
- 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 discussed 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.
  - Jennifer Sheridan will work with Lisa Frehill (NMSU) and others on a Supplement to the ADVANCE grants that will re-evaluate the Indicators, and standardize reporting.

  - 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. We have now passed this work on to the American Women in Science organization, which will be publishing an online database.
  - We are collaborating with researchers at Virginia Tech on a national study of dual career couples.
- Advice. We continue to provide advice and information to ADVANCE sites as they organize their projects. We provide access to campus policies (such as our tenure clock extension policy, our dual career couples program, or our Ombuds program), advice on climate survey implementation, recommendations on administrative matters such as hiring a program coordinator or creating cost-share reports, and copies of our training materials (especially our two brochures).
- Leadership. WISELI co-PIs Molly Carnes and Jo Handelsman regularly give talks on gender equity around the country. Some of the institutions to which they have spoken in 2004 include: HHMI, MIT, Harvard, University of Georgia, Georgia Tech, University of Minnesota, Virginia Commonwealth University, the University of Illinois at Chicago, the NIH Women's Health Roundtable for the Office of Research on Women's Health[3], the annual meeting of the Directors of the DHHS designated National Centers of Excellence in Women's Health, and the NIH Roadmap Workshop on Multidisciplinary Clinical Research Training.

[3] Our participation resulted in the inclusion of gender equity as it impacts the career of women scientists in the Office's 2005 priority areas for research.

# *IV. Findings: Difficulties & Solutions*

## Administration and structure

- Time allocation of co-Directors. Carnes and Handelsman remain busy, participating in a number of important committees, projects, research programs, teaching, and grants in addition to their work with WISELI. Their commitment to the ADVANCE project and WISELI continues to be paramount and affects all of their other activities, where they bring gender issues to discussion. These activities enhance their role in WISELI. As our site visit team reported, "The visibility of the Principal Investigators, women who are successful scientists in their own rights, aids in the legitimacy of the program, since these are not women who are viewed as "women in trouble." Instead, they are both strong leaders of considerable accomplishment who decided to use their influence to address climate related issues, particularly attitudes and barriers that limit women's success in the sciences and engineering."

- Structure and function of Leadership Team. Each year we have re-evaluated the way we interact with our Leadership Team members, as we are still looking for the optimal way to leverage their talents. In 2004, we changed the format of our Leadership Team meetings to a more collaborative approach, rather than merely using the time to "report" on WISELI's work; this seems to have engaged the LT members in a more positive way. At the same time, we continue to have issues of empowerment; Leadership Team members remain unsure when they can do gender equity work under the umbrella of WISELI.

  A renewed commitment to meet with each LT member individually each year should help to alleviate these concerns, and provide the feedback and encouragement necessary to empower LT members to follow through on their ideas.

- Not enough time or personnel to do everything. We have only two years left to "transform" the UW-Madison. It is clear that our approach of using research to engage faculty is working, and that our new initiatives are successful. We are pouring our personnel time and resources into making these existing programs work, and demonstrating that they work, so that we will be able to export them to other campuses in the future. This leaves little time to add to our agenda, even when we see a good idea that we should pursue (e.g., bridge research funding in the case of a new baby/adoption.) 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 and institutionalization (specific and general)

- Life Cycle Grants. Our completed evaluation of this program demonstrated to UW Administrators the great value of this program. Our current difficulties now will involve: (1) expanding it to faculty in all divisions; (2) finding permanent funding and/or raising an endowment for the program; and (3) selecting which candidates are the most deserving when all applicants are facing difficult personal issues—a continuing difficulty faced with each round of proposals.
- Training for Chairs of Hiring Committees. In 2003 we reported that we had made compromises in the format of our training for chairs of hiring committees when the Provost's Office wanted to use our training immediately. In 2004, we entered into a closer collaboration with the Office of the Provost, so that we might test a variety of structures and formats for the workshops, and at the same time spread the job of training all of the search chairs among more people. This re-organization was very successful, as together we trained 70 chairs or members of hiring committees across campus using a variety of formats (our original 3-session design, a college-based 1-session workshop, and a 1-session small-group format.)
- Climate Workshops for Department Chairs. One dean insisted that we run one of these workshops for chairs in his School only, claiming that a particular group of departments was "so different" from others that they should have a separate section. Our intuition told us this was a bad idea, but we wanted to be accommodating. It turns out that our intuition was correct—holding these intensely personal workshops with chairs all in the same School is not a good idea. The chairs do not inhibit their behavior as they do when they are around peers they do not know, nor do they learn about new ways of doing things because they all know each other. After this experience, we will insist that workshop groups are comprised of chairs from different Colleges.
- Individual advocacy. WISELI co-Directors continue to spend a great deal of time on cases of individual advocacy. In 2003, the bulk of these cases appeared through our conversations with senior women. In 2004, many of them came from the Life Cycle Research Grant program, and through word-of-mouth as WISELI has become even better known and visible. We continue to think about how best to institutionalize this function but are pleased that WISELI has provided a safe place for women faculty and staff to come to discuss gender-related issues.

## Overall campus perceptions and attitudes

- Gaining support of department chairs and faculty. Due to our successful climate workshops for department chairs, we feel that we have gained support from chairs. Gaining support from rank-and-file male faculty, however, continues to be an issue. We think that our training for hiring committees is the best way to reach all faculty. Rather than limiting the training to committee chairs, we are creating opportunities for *all* faculty on a hiring committee as well as key staff involved in recruitment to receive our training. This has been effective in the Medical School and the College of Engineering, where we ran school-based workshops on hiring that reached a wider audience. We feel that this is the best way to teach faculty how unconscious biases and assumptions might affect the way they view and evaluate their female colleagues.

- 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 suggests that many faculty, administrators and staff remain unaware of 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 have found, however, that the department-level climate surveys administered through our climate workshops for department chairs are alerting department members to the issues (over 2,000 have taken the survey to date), and because most chairs have been reporting the results of their surveys back to their faculty, we believe that we are making inroads on this issue within departments.

## Evaluation difficulties

- Designing evaluation of initiatives. The implementation of our initiatives has changed over time, particularly that for the training of chairs of hiring committees. We have had to change our design and timeline for evaluating this training several times. As the hiring season comes to a close in early 2005, we hope to be able to design an evaluation that is meaningful and takes into account all of the different formats in which chairs received training.
- Respondent fatigue. As we begin interviewing more people for issue studies and evaluations of existing programs, we are finding "overlaps" with our other studies and evaluations. In an effort to decrease respondent burden and ensure a high response rate for the evaluation contacts we need the most, we are becoming more choosey in who we interview and survey, and are removing respondents from interview lists even if they fit the sample description.

# *V. 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 | Provost Peter Spear | Dean Martin Cadwallader, Graduate School |
| Sr. Vice President Cora Marrett, UW System | Dean Jeanette Roberts, Pharmacy | Dean Daryl Buss, Veterinary Medicine |
| Dean Phil Farrell, Medical School | Dean Elton Aberle, College of Agricultural & Life Sciences | Assoc Dean Tim Mulcahy, Graduate School |
| Assoc Dean Terry Millar, Graduate School | Dean Robin Douthitt, School of Human Ecology | Dean Katharyn May, School of Nursing |
| Assoc. Dean Mariamne Whatley, School of Education | Don Schutt, Human Resources | Director Luis Pinero, Equity & Diversity Resource Center |

## 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

# *VI. Financial Reports*

**2004 Financial Report**

| | 2002 | 2003 | 2004 | Total |
|---|---|---|---|---|
| Income | | | | |
| NSF | $750,000 | $750,000 | $750,000 | $2,250,000 |
| Celebrating Grants | $6,000 | $13,365 | $4,000 | $23,365 |
| College of Engineering | $10,000 | $20,000 | $10,000 | $40,000 |
| Salaries and Fringes | | | | |
| Directors | $145,180 | $115,306 | $103,088 | $363,574 |
| WISELI Staff | $98,419 | $128,547 | $156,006 | $382,972 |
| Leadership Team | $69,725 | $143,700 | $61,618 | $275,043 |
| Evaluators | $88,261 | $72,110 | $57,076 | $217,447 |
| Travel | $9,758 | $9,637 | $15,291 | $34,686 |
| Supplies and Equipment | $17,972 | $12,348 | $12,757 | $43,077 |
| Initiatives | | | | |
| Celebrating Grants | $0 | $9,037 | $11,170 | $20,207 |
| Life Cycle Research Grants | $0 | $57,648 | $52,910 | $110,558 |
| Video | $12,169 | $5,160 | $7,079 | $24,408 |
| Survey | $0 | $33,381 | $0 | $33,381 |
| Book Giveaways | $1,756 | $395 | $0 | $2,151 |
| WISELI Seminar | $273 | $537 | $875 | $1,685 |
| Senior Women Development | $172 | $114 | $0 | $286 |
| Workshops | $2,015 | $1,085 | $1,377 | $4,477 |
| Chairs' Climate Workshops | $0 | $174 | $1,132 | $1,306 |
| Search Committee Chairs' Workshops | $0 | $382 | $1,142 | $1,524 |
| Awards Brochure | $0 | $0 | $305 | $305 |
| Overhead | $198,942 | $251,851 | $200,416 | $651,209 |
| Total Income | $766,000 | $783,365 | $764,000 | $2,313,365 |
| Total Expenditures | $644,642 | $841,412 | $682,240 | $2,168,295 |

**2005 Proposed Budget**

| | 2002-04 Total | 2005 Proposed | Total |
|---|---|---|---|
| Income | | | |
| NSF | $2,250,000 | $750,000 | $3,000,000 |
| Celebrating Grants | $23,365 | $10,000 | $33,365 |
| College of Engineering | $40,000 | $10,000 | $50,000 |
| Salaries and Fringes | | | |
| Directors | $363,574 | $100,000 | $463,574 |
| WISELI Staff | $382,972 | $160,000 | $542,972 |
| Leadership Team | $275,043 | $62,000 | $337,043 |
| Evaluators | $217,447 | $85,000 | $302,447 |
| Travel | $34,686 | $10,000 | $44,686 |
| Supplies and Equipment | $43,077 | $15,000 | $58,077 |
| Initiatives | | | |
| Celebrating Grants | $20,207 | $10,000 | $30,207 |
| Life Cycle Research Grants | $110,558 | $56,540 | $167,098 |
| Video | $24,408 | $15,000 | $39,408 |
| Survey | $33,381 | $0 | $33,381 |
| Book Giveaways | $2,151 | $400 | $2,551 |
| WISELI Seminar | $1,685 | $875 | $2,560 |
| Senior Women Development | $286 | $0 | $286 |
| Workshops | $4,477 | $1,500 | $5,977 |
| Chairs' Climate Workshops | $1,306 | $1,500 | $2,806 |
| Search Committee Chairs' Workshops | $1,524 | $1,500 | $3,024 |
| Awards Brochure | $305 | $500 | $805 |
| Overhead | $651,209 | $231,738 | $882,947 |
| Total Income | $2,313,365 | $770,000 | $3,083,365 |
| Total Expenditures | $2,168,295 | $751,553 | $2,919,847 * |

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

**Cost Sharing Summary (January 1, 2002 - December 31, 2004)**
**WISELI**

| | Certified Year 1+2 Total | Uncertified Year 3 (2004) | TOTAL Year 1 - Year 3 | *Estimate Year 4 (2005)* |
|---|---|---|---|---|
| Salaries & Fringe Benefits[1] | $49,573 | $34,303 | $83,876 | *$20,379* |
| Graduate Student support[2] | $45,079 | $28,899 | $73,978 | *$22,860* |
| Symposium support[3] | $12,245 | $10,970 | $23,215 | *$10,000* |
| WISE Program support[4] | $22,033 | $5,729 | $27,762 | *$5,729* |
| Other Program support[5] | $79,670 | $29,275 | $108,945 | *$45,316* |
| Indirect Costs | $91,423 | $47,433 | $138,856 | *$45,716* |
| Total Costs | $300,012 | $156,609 | **$456,621** | *$150,000* |

1-Includes faculty and staff salaries and fringe benefits for 2002, 2003 and 2004.
2-Graduate student support is for: 1 Research Assistant at 50% beginning 9/1/02 through 12/31/04; 1 Project Assistant at 50% beginning 9/1/03 through 1/31/04.
3-Funds for Celebrating Women in Science & Engineering Grant program.
4-Includes program support and undergraduate support for the Women in Science and Engineering Residential Program.
5-Includes funds for documentary video project, survey of faculty and academic staff, the Life Cycle Research Grant programs, and contributions towards equipment and supplies from the College of Engineering.

# *VII. P.I.s' Current and Pending Support*

**Jo Handelsman**
**Current and Pending Support**
**December 2005**

**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%)

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

**NSF:** Profile of Signal Molecules in a Soil Microbial Community; 11/1/04-10/31/05; $144,000; (5%)

**PENDING:**

**Hatch:** 10/01/05-9/30/07; co-PIs: K. Raffa, H. Blackwell Small molecule synergists of Bacillus thuringiensis for control of Insect Pests. (5%)

**CARNES, MARY L. (MOLLY)**

**CURRENT RESEARCH SUPPORT:**

**Project Number:** 0123666 **Type:** Cooperative agreement
**P.I.:** M. Carnes, 40%
**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.:** Carnes, 10%
**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:** $50,500
**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, 0% salary
**Source:** National Institute on Aging
**Title:** Women's Health and Aging: Research and Leadership Training Grant
**Dates of Project:** 7/99 – 6/04 **Renewed** 7/04-6/09 **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:** Inst. Mentored Scientist Award
**P.I.:** M. Carnes, 0% 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.

**Project Number: 0402549** **Type:** Cooperative agreement
**PI:** P. Spear; co-PI's: M. Carnes, 0% salary; D. Henderson
**Source:** National Science Foundation
**Title:** Wisconsin Alliance for Minority Participation
**Dates:** 11/1/04 – 10/31/09 **Annual Direct Costs:** $363,750
**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.

**Project Number: K12 HD049112** **Type:** K12 Roadmap
**PI:** M. Carnes 25%
**Source:** National Institutes of Health (NIH), NICHD
**Title:** The Training & Education to Advance Multidisciplinary-Clinical-Research (TEAM) Program
**Dates:** 10/01/04 – 9/30/09 **Current Year Direct Costs:** $1,087,658
**Goals:** This 5 year grant will expand the nation's capacity to conduct clinical research by multidisciplinary teams. The program will emphasize research in one of 10 multidisciplinary areas of clinical research. This program will establish and validate methods for training a work force to carry out the nation's clinical agenda, as put forth in the NIH Roadmap. It involves over 72 VA and UW-Madison faculty as primary mentors and an additional 100 as secondary mentors. At capacity this will train up to 25 scholars at one time in programs ranging from 2-5 years.

**PENDING RESEARCH SUPPORT:**

**Project Number:** 0450371 **Type:** Cooperative agreement
**PI:** M. Cadwallader; co-PI's: M. Carnes (0% salary); D. Henderson
**Source:** National Science Foundation
**Title:** Collaborative Research: Wisconsin AGEP
**Dates:** Pending **Annual Direct Costs:** $1,330,000
**Goals:** This grant will support efforts to enrich the pipeline of academic science and engineering with diverse trainees by drawing together 3 institutions conferring PhDs in the sciences and engineering in the State of Wisconsin to commit to doubling the number of underrepresented minority students awarded PhDs degrees in science and engineering with an eye toward the professoriate. Efforts devoted to this cooperative agreement are congruent with Dr. Carnes' service as a faculty member to the State and University of Wisconsin.

# *VIII. WISELI Publications and Presentations*

**Papers Published:**

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.

Gunter, Ramona and Amy Stambach. 2003. "As Balancing Act and As Game: How Women and Men Science Faculty Experience the Promotion Process." *Gender Issues*. 21(1):24-42.

**Working Papers:**

Carnes, Molly; Jo Handelsman; Jennifer Sheridan; Eve Fine. 2004. "How Do You Make a University Stop "Smoking"? Applying the Transtheoretical Model of Behavioral Change to Faculty Diversity Issues in Academia." In progress.

Pribbenow, Christine Maidl; Susan Daffinrud; and Deveny Benting. 2004. "The 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. 2004. "Assessing "Readiness to Embrace Diversity": An Application of the Trans-Theoretical Model of Behavioral Change." In progress.

Brennan, Patricia; Jennifer Sheridan; Molly Carnes; Jo Handelsman; and Bernice Durand. 2004. "Discovering Directions for Change in Higher Education Through the Experiences of Senior Women Faculty." Accepted for publication, special issue of *Journal of Technology Transfer* (Volume 31, Issue 1. Jan./Feb. 2006).

Gunter, Ramona and Amy Stambach. 2004. "Differences in Men and Women Scientists Perceptions of Workplace Climate." In progress.

Li, Jing. 2004. "Does Child Bearing Affect Women's Academic Progress at Senior Level?" In progress.

Pribbenow, Christine Maidl and Deveny Benting. 2004. "Why Women Leave." In progress.

Carnes, Molly; Stacie Geller, Eve Fine, Jennifer Sheridan, and Jo Handelsman. 2004. NIH Director's Pioneer Awards: Could the Selection Process Have Favored Men?" Under Review.

Handelsman, Jo; Nancy Cantor, Molly Carnes, Nancy Hopkins, Cora Marrett, Denice Denton, Eve Fine, Sue Rosser, Jennifer Sheridan, and Virginia Valian. 2004. "More Women in Science." In progress.

**Presentations:**

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.

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.

Gunter, Ramona. October 20, 2003. "Science Faculty Talk about Self, Home, and Career." Presented at the WISELI Seminar. Madison, WI.
Sheridan, Jennifer. November 17, 2003. "Faculty Worklife at the University of Wisconsin-Madison: Preliminary Findings." Presented at the WISELI Seminar. Madison, WI.

Sheridan, Jennifer. January 12, 2004. Panelist at Virginia Tech's AdvanceVT Inaugural Workshop, "ADVANCEing Women in Academe: Voices of Experience." Roanoke, VA.

Carnes, Molly. February 13, 2004. Discussant on the "Status of STEM Female Faculty Recruitment, Retention and Advancement" panel for the "Systemic Transformations in the Role of Women in Science and Engineering" Symposium for the Annual Meeting of the American Association for the Advancement of Science meetings. Seattle, WA.

Ford, Cecilia. February 16, 2004. "Getting our Voices Heard: Patterns of Participation in University Meetings." Presented at the WISELI Seminar. Madison, WI.

Sheridan, Jennifer. February 17, 2004. "Implementing a campus climate survey: logistical notes and preliminary findings." Presented to the Center for Demography & Ecology Training Seminar. Madison, WI.

Pribbenow, Christine Maidl. March 22, 2004. "The Climate for Women Faculty in the Sciences and Engineering: Their Stories, Successes, and Suggestions." Presented at the WISELI Seminar. Madison, WI.

Sheridan, Jennifer. April 13, 2004. "Study of Academic Staff Work Life at UW-Madison: Preliminary Results." Presented at the Wisconsin Center for the Advancement of Postsecondary Education Academic Staff Institute 2004. Madison, WI.

Sheridan, Jennifer. April 20, 2004. Session Coordinator, "ADVANCE Institutional Data" panel. NSF ADVANCE National Conference. Atlanta, GA.

Carnes, Molly. April 20, 2004. Presenter, "Women from Underrepresented Groups" panel. NSF ADVANCE National Conference. Atlanta, GA.

Durand, Bernice. April 20, 2004. Session Coordinator, "Senior Women and Advancement—A Facilitated Discussion" panel. NSF ADVANCE National Conference. Atlanta, GA.

Sheridan, Jennifer. April 21, 2004. Presenter, "Campus Climate Surveys" panel. NSF ADVANCE National Conference. Atlanta, GA.

Spear, Peter. April 21, 2004. Presenter, "Sustainability of ADVANCE Programs" panel. NSF ADVANCE National Conference. Atlanta, GA.

Ford, Cecilia. May 3, 2004. ""Having our ideas ignored": CA and a Feminist Project." Presented at the American Association for Applied Linguistics Annual Conference, colloquium entitled " CA as Applied Linguistics: Crossing Boundaries of Discipline and Practice." Portland, OR.

Sheridan, Jennifer; Jo Handelsman; Molly Carnes. August 14, 2004. "Assessing "Readiness to Embrace Diversity": An Application of the Trans-Theoretical Model of Behavioral Change." Presented at the American Sociological Association meetings, session entitled "Workplace Diversity." San Francisco, CA.

Carnes, Molly. October 13, 2004. "Searching for Excellence, Equity & Diversity: Unconscious assumptions and lessons from smoking cessation." Virginia Commonwealth University. Richmond, VA.

Sheridan, Jennifer. October 14, 2004. "WISELI's Life Cycle Research Grant Program." Presented at the Society of Women Engineers National Conference, Milwaukee, WI.

Carnes, Molly. October 20, 2004. "Women in Academic Leadership: The Issues, the Goals, the Process." [to over 50 women faculty from STEM departments at UIC]; NSF ADVANCE Program at UW-Madison [approx 30 faculty, chairs, and deans from STEM departments.], Chicago, IL.

Brennan, Patricia; Molly Carnes, Bernice Durand, Jo Handelsman, and Jennifer Sheridan. November 10, 2004. "Discovering the Experiences of Senior Women in Academic Science & Engineering." Presented at the WISELI Seminar. Madison, WI.

Carnes, Molly. November 17, 2004. "The Impact of Unconscious Biases on Evaluation: Relevance to the NIH Director's Pioneer Awards." Invited presenter, Office of Research on Women's Health Roundtable discussion, NIH, Bethesda, MD.

Carnes, Molly; Jo Handelsman, Lillian Tong, and Amy Wendt. December 8, 2004. "WISELI Update—Status of Our Efforts to Promote the Advancement of Women in Science and Engineering." Presented at the WISELI Seminar. Madison, WI.

Peercy, Paul. December 13, 2004. "NSF ADVANCE Institutional Transformation Award at UW-Madison." Presented at the NSF ADVANCE Engineering Workshop, Washington DC.

**Products Available to the Public:**

"Study of Faculty Worklife at the University of Wisconsin-Madison." Climate survey instrument.

"Study of Faculty and Academic Staff Worklife at the University of Wisconsin-Madison." Climate survey instrument.

"Enhancing Department Climate: A Chair's Role. Resources." Available online at: http://wiseli.engr.wisc.edu/initiatives/climate/ALSWorkshop_Resources.doc .

"Searching for Excellence and Diversity: A Guide for Faculty Search Committee Chairs."
"Reviewing Applicants: Research on Bias and Assumptions." Brochure available online at: http://wiseli.engr.wisc.edu/initiatives/hiring/Bias.pdf , and also available in large quantities for 25¢/brochure plus mailing costs by contacting wiseli@engr.wisc.edu.

"Advancing Your Career through Awards and Recognitions: A Guide for Women Faculty in the Sciences & Engineering." Brochure available in large quantities for 50¢/brochure plus mailing costs by contacting wiseli@engr.wisc.edu.

"Women in Science and Engineering Leadership Institute: Year One." Documentary Video, first in series of three. Available online through The Research Channel: http://www.researchchannel.com/program/displayevent.asp?rid=2217 .

**Evaluation Reports:**

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

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."

Pribbenow, Christine Maidl and Deveny Benting. June 9, 2004 (revised September 23, 2004.) "WISELI's Life Cycle Research Grant Program: Formative and Summative Evaluation."

Sheridan, Jennifer; Deveny Benting; and Christine Maidl Pribbenow. July 27, 2004. "Evaluation of the Women Faculty Mentoring Program at the University of Wisconsin-Madison."

Sheridan, Jennifer and Deveny Benting. October 29, 2004. "Evaluation of the Tenure Clock Extension Policy at the University of Wisconsin-Madison."

Winchell, Jessica. October 2004. "Celebrating Women in Science & Engineering Grant Program, 2002-2004. Interim Evaluation Report."

**Presentations of WISELI Activities to Campus Groups**

**Deans' Council**—9/4/2002, 12/10/2003
**CALS Department Chairs and Deans**—10/28/2002, 1/26/2004
**ENGR Department Chairs and Deans**—11/6/2002, 2/4/2004
**Medical School Clinical Science Chairs**—10/14/2002, 3/9/2004
**Medical School Basic Science Chairs**—10/8/2002
**Pharmacy Division Heads and Deans**—4/12/2004
**SVM Department Chairs and Deans**—12/17/2002, 2/5/2004
**L&S Natural Science Chairs**—11/18/2002, 9/20/2004
**SoHE Department Chairs and Deans**—2/23/2004
**Education Department Chairs and Deans**—3/3/2004
**Biological Science Deans**—12/16/2003
**Graduate School Deans**—9/30/2004
**Other Groups:**
- **Department of Plant Pathology**—12/4/2002
- **Women in Physical Sciences**—5/2003, 2/23/2004
- **Women in Engineering**—3/18/2004
- **University League**—11/24/2003
- **College of Engineering (CoE) Academic Affairs**—11/21/2003
- **CoE Equity & Diversity Committee**—4/14/2004
- **CoE Committee on Academic Staff Issues**—4/28/2004
- **Committee on Women in the University**—2/18/2004
- **Women Faculty Mentoring Program**—9/19/2003
- **Plan 2008 Campus Resource Fair**—5/7/2002
- **Showcase 2002**—4/3/2002
- **Showcase 2004**—4/5/2004
- **Academic Staff Executive Council**—3/6/2003, 3/5/2004
- **WISELI Seminar**—10/20/2003, 11/17/2003, 2/16/2004, 3/22/2004, 11/10/2004, 12/8/2004

# *IX. Quantitative Indicators of Activity and Progress*

(Available March, 2005.)

# **WISELI Evaluation and Research Status Report:**
Departmental Climate Workshops

# WISELI Evaluation and Research: Status Report

## *Department Climate Workshops*

| | Departments Surveyed | Survey Population | Final n= | Response Rate |
|---|---|---|---|---|
| Pilot Group: Fall 2003 *3 sessions* | Biomedical Engineering | 26 | 13 | 50% |
| | Biomolecular Chemistry | 101 | 30 | 30% |
| | Nutritional Sciences | ? | 39 | N/A |
| Workshops: Spring 2004 *3 sessions* | Electrical and Computer Engineering | 415 | 126 | 30% |
| | Medical History and Bioethics | 16 | 9 | 56% |
| | Anthropology | 45 | 24 | 53% |
| | Animal Sciences | ~60 | 41 | 68% |
| | Engineering Professional Development | 88 | 61 | 69% |
| Workshops: Fall 2004 *3 sessions* | Pharmacy Practice | 25 | 15 | 60% |
| | Family Medicine | ~650 | 206 | 32% |
| | Engineering Physics | 46 | 34 | 74% |
| Workshops: Fall 2004[1] *3 sessions* | Genetics | 189 | 93 | 49% |
| | Biostatistics and Medical Informatics | ~75 | 27 | 36% |
| | Oncology | 171 | 102 | 60% |
| | Physiology | 127 | 52 | 41% |
| **TOTALS[2]** | **15** | **2,034** | **833** | **41.0%** |

Facilitators: Jo Handelsman
Eve Fine

Evaluators: Christine Pribbenow
Deveny Benting

**Other Workshops:**

Academic Leadership Series, March 30, 2004, 18 participants

[1] We are still accepting survey responses for these departments, so these are preliminary numbers. Updated 11/7/2004.
[2] Totals do not include the Nutritional Sciences department because the survey population is unknown.

# **WISELI Evaluation and Research Status Report:**
Celebrating Women in Science & Engineering Grant Program, 2002-2004 (interim report)

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

## Celebrating Women in Science & Engineering Grant Program

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 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.

### Award Recipients and Guest Lecturers, 2004-2005

| Recipient | Department | Invited Speakers |
|---|---|---|
| Jennifer Beckham | Women in Computer Sciences | **Dina Bitton, Ph.D.**<br>Founder and CTO of Callixa<br>**Dr. Barbara Ryder, Ph.D.**<br>Div. of Computer and Information Sciences<br>Rutgers University<br>**Dr. Mary Fernandez, Ph.D.**<br>Principal Technical Staff Member<br>AT&T Labs- Research |
| Amy Berta | Graduate Women in Science | **Career Panelists**<br>**To be announced** |
| Sandy Courter | Engineering Learning Center | **Carol Muller, Ph.D.,**<br>President and CEO<br>MentorNet |
| Erin Gill | Biomedical Engineering | **Silvia Mioc**<br>President<br>Colorado Photonics Industry Assn.<br>**Two additional speakers**<br>**To be announced** |
| Tami Lassiter | Chemistry | **Nancy Houfek, Ph.D.**<br>Institute for Advanced Theatre Training<br>Harvard University<br>Workshops on "Learning the Art of Persuasion to Advance your Academic Career" |

| | | |
|---|---|---|
| Daniel Vimont | Atmospheric and Oceanic Sciences | **Kerry Cook, Ph.D.**<br>Dept. of Earth and Atmospheric Sciences<br>Cornell University<br>**Gabriele Hegerl, Ph.D.**<br>Div. of Earth & Ocean Sciences, Nicholas School for the Environment<br>Duke University<br>**Eugenia Kalnay, Ph.D.** Dept. of Meteorology, University of Maryland<br>**Paola Rizzoli, Ph.D.**<br>Director, MIT/Woods Hole Oceanographic Institution Joint Program Dept. of Earth, Atmospheric, and Planetary Sciences<br>MIT<br>**Arlene Fiore, Ph.D.**<br>National Oceanic and Atmospheric Administration<br>**Five additional speakers**<br>**To be announced** |

## Award Recipients and Guest Lecturers, 2003-2004

| Recipient | Department | Invited Speaker |
|---|---|---|
| Mary Behan, Ph.D. | School of Veterinary Medicine Comparative Biosciences | **Phyllis Wise, Ph.D.,**<br>Dean, Division of Biological Sciences and Professor of Physiology<br>University of California-Davis |
| Kirstie Danielson | Population Health Sciences Student Organization | **Colleen McHorney, Ph.D.**<br>Dept. of Medicine<br>Indiana University<br>**Additional Speaker TBA** |
| Cecilia Ford, Ph.D. & Lindsay Stoddard Cameron | UW-Madison Committee on Women & Women Faculty Mentoring Program | **Virginia Valian, Ph.D.,**<br>Dept. of Psychology<br>Hunter College |
| Laura Knoll, Ph.D. | Medical Microbiology and Immunology | **Cindy Grove Arvidson, Ph.D.**<br>Dept. of Microbiology and Molecular Genetics<br>Michigan State University<br>**Julie L. Badger, Ph.D.**<br>Dept. of Pathology and Pediatrics<br>University of Southern California School of Medicine<br>**Katherine R. Spindler, Ph.D.**<br>Dept. of Microbiology and Immunology<br>University of Michigan Medical School<br>**Jennifer Lodge, Ph.D.**<br>Dept. of Biochemistry and Molecular Biology<br>St. Louis University |

| | | |
|---|---|---|
| Regina Murphy, Ph.D. | Chemical and Biological Engineering | **Paula Hammond, Ph.D.**<br>Dept. of Chemical Engineering,<br>Massachusetts Institute of Technology<br>**Teresa Gook, Ph.D.**<br>Dept. of Chemical and Biochemical Engineering, University of Maryland -Baltimore County<br>**1 additional speaker TBA** |
| Anna Pidgeon, Ph.D. | Forest Ecology and Management | **Susan J. Hannon, Ph.D.**<br>Professor, Dept. of Biological Sciences<br>University of Alberta, Canada |
| Karen Spach | Graduate Women In Science | **Claudia Barretto, Ph.D.**<br>Dept. of Biological Sciences<br>University of Wisconsin - Milwaukee<br>**Barbara Lyle, Ph.D.**<br>Program Manager<br>Kraft Research<br>**Katerina Moloni, Ph.D.**<br>Vice President of Marketing<br>nPoint<br>**Susan Smith, Ph.D.**<br>Nutritional Sciences<br>University of Wiscosin – Madison<br>**Regina Vidaver, Ph.D.**<br>Science Writer and Editor<br>Plant Pathology<br>University of Wisconsin - Madison |

## Award Recipients and Guest Lecturers, 2002-2003

| | | |
|---|---|---|
| Louis Armentano, Ph.D. | Dairy Science | **Helen LaPierre, Ph.D.**<br>McGill University |
| Andrea Arpaci-Dusseau, Ph.D. | Computer Sciences | **Margo Seltzer, Ph.D.**<br>Dept. of Computer Sciences<br>Harvard University |
| Keith Knapp, Ph.D. | Civil & Environmental Engineering / University Transportation Center | **Jenny Grote, P.E., PTOE**<br>Institute of Transportation Center<br>Transportation Engineers International<br>President of ITE |
| Susan Nitzke, Ph.D., R.D. | Nutritional Sciences | **Joanne Slavin, Ph.D.**<br>Food Science and Nutrition<br>University of Minnesota |
| Rick Nordheim | Statistics | **Jessica Utts, Ph.D.**<br>Department of Statistics<br>University of California-Davis<br>**Grace Yang, Ph.D.**<br>Dept of Mathematics, Statistics Program<br>University of Maryland at College Park |
| Karen Spach | Neuroscience Training Program & Graduate Women in Science | **Ellen Burg, Ph.D.**<br>Co-founder, BioSeek, Inc. |

# INTERIM EVALUATION REPORT:
# Celebrating Women in Science & Engineering Grant Program, 2002-2004

*Prepared by Jessica Winchell, WISELI Project Assistant, October 2004*

Since 2002, WISELI has sponsored the Celebrating Women in Science & Engineering Grant Program. This program provides funding to departments, centers, or student groups 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. Applicants may use funds to invite a prominent woman in science or engineering to present her work at a departmental seminar, invite an officer from a major funding agency to discuss the importance of diversity issues to the agency, create a special one-day symposium to educate a department/center on the issues of women in science and engineering, or similar events.

WISELI expects that invited speakers will promote the advancement of women in science and engineering by contributing to the scientific discourse in various departments, increasing the visibility of women in science and engineering, and serving as role models and potential mentors for women students. The program also encourages departments to routinely include women among its seminar/colloquium speakers.

WISELI solicits applications for the grant program through its website, listservs, e-mail announcements to deans and department chairs in the natural and physical sciences, and through word-of-mouth. Applications are evaluated on the basis of their congruence with WISELI's goals for speakers. Recipients are required to submit evaluations of the effectiveness of their speaker in advancing WISELI's goals.

### *Awards granted under the program*

WISELI awarded a total of 19 grants between 2002 and 2005. Grants were awarded to a number of departments in the biological sciences, physical sciences, and engineering. Grants were also awarded to the Graduate Women in Science student organization and the Committee on Women in the University and the Women Faculty Mentoring Program (jointly). Thus, the awardees spanned various science and engineering fields and various women's organizations. Figure 1 presents this distribution.

Award recipients typically used the WISELI grant to bring prominent women scientists to the UW-Madison campus. Guest speakers participated in a large number and wide variety of events on campus. Most gave research presentations, participated in question and answer sessions, and attended small-group luncheons or dinners. Some also lectured to one or more classes, met with student organizations, held one-on-one meetings with graduate students, faculty members, or post-doctoral students, or attended small-group discussions. The schedule of activities for one Celebrating Women in Science and Engineering Grant speaker is reproduced in Figure 2 to illustrate a typical visit.

A few grant projects took a different shape. One, sponsored by the Graduate Women in Science group, was used to bring a variety of women scientists together on a career panel. The panel

addressed various science career options, spoke to issues of family/career interface, and offered advice for navigating graduate school as well as career paths. The Engineering Learning Center received a Celebrating Women grant to facilitate the visit of the president and CEO of MentorNet, a non-profit organization which pairs aspiring women scientists with established professional women in the field. Finally, the Committee on Women in the University and the Women Faculty Mentoring Program were jointly awarded a grant that enabled them to host a luncheon for UW-Madison faculty and staff with Virginia Valian. This special program included a research presentation and question-and-answer session, both of which focused on Valian's research on gender issues in university settings.[1]

***Program 'reach'***

The various activities that visitors participated in were intended to reach a variety of audiences on the UW-Madison campus. For example, research presentations were open to a wide range of interested persons, while dinner meetings often encouraged networking between women scientists by limiting attendance to women graduate students and faculty members, or focused on research by including only those with shared research interests. WISELI intended that each of these activities would serve the broad goals of the grant program.

Attendance numbers for sponsored speakers' activities were very good. Lectures drew the largest audience, with an average of 44 people in attendance at each. This indicates that the Celebrating Women grants reached a sizeable campus audience. The make-up of the audiences, which covered a wide-variety of campus populations including men and women undergraduates, graduate students, post-doctoral fellows, and assistant to full professors, indicates that that the grants reached a diverse audience. Together these facts indicate that the program has a wide 'reach.'

There is also evidence that the program had a 'deep' reach, particularly for graduate students and assistant professors. This is illustrated by the large number of one-on-one meetings and small-group research discussions in which speakers engaged (one visitor met individually with 11 faculty and graduate students!) The prevalence of these meetings suggests that the grants not only fostered a significant amount of scientific and professional interaction, but also expanded professional networks for graduate students and assistant professors.

***Program evaluation***

Each grant recipient was required to complete an evaluation of his or her program. Grant sponsors solicited feedback on their program through questionnaires or informal discussions, and then presented their findings in an evaluation report. The evaluation focused on the impact of the Celebrating Women program on participants and on its contribution to the goal of advancing women in science and engineering.

Evaluation questions focused on three main issues: participant reactions, promotion of women in science and engineering, and best practices.

[1] See also: Benting, Devney and Christine Maidl Pribbenow. November 14, 2003. "Survey of the Virginia Valian Luncheon: Final Report."

On the first issue, WISELI solicited general feedback on the audiences' experiences: what they thought of the speaker, what they learned, and how the program affected their outlook. Responses to this question were overwhelmingly positive, with every evaluation indicating that the audience learned a lot from the speakers and felt that the events were beneficial. Several major themes emerged within these positive responses. Overall audiences felt that the speaker(s) were:

- **Interesting** ("lively discussion," "wonderful insight," engaged audiences asked multiple questions, "among the best seminars [participant had] ever attended")
- **Encouraging** ("extremely open and encouraging," "provided direction for future plans," "helpful guidance," good suggestions on pursuing science & engineering careers)
- **Inspirational** ("supplied them with an example of success," "encouraging thoughts," sparked interest in a new research area or career choice)
- **Informative** ("learned new information," gained insight into a scientific problem, learned about a new technique, "provided a broader perspective")

On the second issue WISELI asked how audiences' experiences and the program overall helped to support women in science and engineering. Responses indicated that invited speakers helped support women in a variety of ways. Several of the most common themes included:

- **Providing a role model** ("clear demonstration that women can and do flourish [in science]", "opened eyes to the relevance/competence of women in [science]," "inspirational," "example of someone [women in engineering] could 'look up to'")
- **Addressing career/family concerns** ("made it seem more possible to manage a career in science and also have a life," "specific advice on becoming successful and tenured while beginning a family," "I think the talk will help me to find a balance")
- **Speaking to climate challenges women face in science and engineering** ("good to hear about how people have dealt with the politics of being female in a mostly male world," "good to get a variety of perspectives on what it's like to be a female academic")
- **Suggesting alternative career paths** (new ideas about non-academic scientific careers, "insight into career options and opportunities")
- **Providing research support** (presentations and small group discussions allowed for research feedback and suggestions, "in depth discussions about everyone's research," "[speaker provided] a good suggestion specific to my research project that I hadn't thought of before")
- **Leadership and networking opportunities** ("helped me understand networking," "great ways to network," encouraged publishing efforts, suggestions on how to maximize mentoring relationships)
- **Mentoring** ("learned a lot about techniques to get where I want to go," "more direction for future plans," "advice useful for any career path in science," "addressed many questions that are important at a transitional phase in a person's career")

Finally, WISELI asked evaluators to provide feedback on what they would do differently if they were to organize the same program again and what WISELI could have done differently to help make their program a success. For the most part, most respondents indicated that they would not change anything in the planning, organization, or implementation of their speaker program. Most noted that they appreciated WISELI's support of the Celebrating Women grants and that they felt WISELI had provided all needed assistance. A few sponsors, both student groups, stated that they would want to advertise their program more effectively if given the chance to plan it again. They also indicated that WISELI could provide "promotional assistance."

Overall, the cumulative evaluation indicates that the Celebrating Women in Science and Engineering Grant Program was positively received, helped to encourage and support the efforts of women scientists and engineers, and was generally well organized and coordinated. In the future, WISELI could improve the effectiveness of the program by providing additional promotional support or guidance. Student group sponsors, who presumably have less experience with organizing events, would particularly benefit from this extra help.

***Conclusion***

The Celebrating Women in Science and Engineering Grant Program offers funding that enables sponsors in the physical and biological sciences and engineering to bring prominent women speakers to the University of Wisconsin-Madison campus. The program aims to expose students and faculty to accomplished women scientists and engineers and to advance women in science and engineering on the UW campus. While on campus, invited speakers are able to contribute to these aims in a variety of venues, including research talks, small-group discussions, and one-on-one meetings. Evaluations from the first two years of the program illustrate an overwhelmingly positive response to the program and very good success in supporting women in science and engineering.

**Figure 1.** Distribution of "Celebrating Women" Grants

| *Biological Sciences* | *Engineering* | *Physical Sciences* | *Other* |
|---|---|---|---|
| ◦ Comparative Biosciences<br>◦ Dairy Science<br>◦ Forest Ecology & Management<br>◦ Medical Microbiology<br>◦ Neuroscience<br>◦ Nutritional Sciences<br>◦ Population Health Sciences | ◦ Biomedical<br>◦ Chemical & Biological<br>◦ Civil & Environmental<br>◦ Engineering Learning Center | ◦ Atmospheric & Oceanic Sciences<br>◦ Chemistry<br>◦ Computer Sciences<br>◦ Physics<br>◦ Statistics<br>◦ Women in Computer Science | ◦ Graduate Women in Science<br>◦ Committee on Women in the University & the Women Faculty Mentoring Program |

**Figure 2.** Typical Schedule for a "Celebrating Women" Guest Speaker

**Guest Speaker:** Dr. Kathy Spindler, University of Michigan Medical School
**Sponsoring Department:** Medical Microbiology & Immunology (MMI)

*January 29*

3:30 – Arrival
4:15 to 5:00 – Meet with Stacey Schultz-Cherry, Asst. Prof. of MMI
6:30 – Dinner with Stacy Schultz-Cherry & Paul Lambert, Prof. of Oncology

*January 30*

early – Breakfast with Dr. Bruce Klein, Prof. of Pediatrics, Internal Medicine, and MMI
9:00 to 9:30 – Meet with Robert Striker, Asst. Prof. of Medicine (Infectious Diseases Section) and MMI
9:45 to 10:15 – Meet with Laura Knoll, Asst. Prof. of MMI
10:30 – 11:00 – Meet with Christina Hull, Asst. Prof. of MMI and Biomolecular Chemistry
11:15 – 11:45 – Meet with Donna Paulnock, Prof. of MMI
11:45 – 1:00 – Research presentation to Journal Club in Microbial Pathogenesis and Host Responses (open seminar)
1:00 – 2:30 – Lunch with MMI graduate students and post-doctoral researchers
2:30 – 3:00 – Meet with Curtis Brandt, Prof. of MMI and Ophthalmology & Visual Sciences
3:15 – 3:45 – Meet with Rebecca Montgomery, Asst. Prof. of Biochemistry and Molecular Virology
4:00 – 4:30 – Meet with Paul Ahlquist, Prof. of Plant Pathology, Molecular Virology, and Oncology
4:45 – 5:15 – Meet with the Stacy Schultz-Cherry lab (1 post doc, 3 grad students)

6:30 – Dinner with Laura Knoll, Robert Striker, Rebecca Montgomery, and Stacey Schultz-Cherry

*January 31*

early – Breakfast with Rick Gourse, Prof. of Bacteriology
10:15 – Departure

# **WISELI Evaluation and Research Status Report:**
Life Cycle Research Grant Program


# WISELI'S LIFE CYCLE RESEARCH GRANT PROGRAM: FORMATIVE AND SUMMATIVE EVALUATION

*Submitted to:*

Molly Carnes and Jo Handelsman
Co-PIs, WISELI

Jennifer Sheridan
Executive Director, WISELI

*Submitted by:*

Christine Maidl Pribbenow and Deveny Benting
Evaluators, WISELI

**UPDATED VERSION**
**September 23, 2004**

This material is based on work supported by the National Science Foundation under Grant No. 0123666. Any opinions, findings and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

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## Background

The Women in Science and Engineering Leadership Institute (WISELI) project is funded through a National Science Foundation grant for five years (2002-2006). It is one of 19 grants awarded through the NSF ADVANCE[1] Program to primarily doctoral universities around the country. The long-term goal of WISELI is to ensure that the gender make-up of faculty, department Chairs, and Deans reflects the make-up of the undergraduate students. To achieve this goal, the WISELI initiative seeks to transform the UW-Madison campus into a "living laboratory" to promote gender equity for women in science and engineering through issue studies, research and evaluation, and the continuation and development of campus initiatives and programs.

One critical initiative, related to the mission of WISELI, was the creation of the Life Cycle Research Grant (LCRG) program. In the original proposal, the following describes the purpose of these grants:

> Research grants will be available to women faculty at critical junctures in their professional careers (e.g., between grants, a new baby, parent care responsibilities). These grants are meant to be flexible and women may apply for varying amounts and academic purposes. (p.18)

In the original "Call for Proposals" on the WISELI website[2], the following describes the program and identifies who is eligible:

> In collaboration with the Graduate School, WISELI (the Women in Science & Engineering Leadership Institute) is pleased to announce the Life Cycle Research Grant Program. These funds will be available to faculty and permanent PIs at the University of Wisconsin-Madison who are at critical junctures in their professional careers when research productivity is directly affected by personal life events (e.g., a new baby, parent care responsibilities, a life-partner's illness, one's own illness). These grants are meant to be flexible and faculty may apply for varying amounts and academic purposes.
>
> Eligibility: These funds will be available to faculty and permanent PIs at the University of Wisconsin-Madison who are members of the biological or physical sciences division, or who can demonstrate that their research is in the biological or physical sciences.

The LCRG program was initiated in the fall semester of 2002 and will continue through fall of 2005. Since its inception, seven people have received grants (see Table 1).

[1] NSF SBE – 0123666, $4.75 million provided from January 1, 2002 to December 31, 2006; the ADVANCE Program is subtitled "Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers" and its mission as stated is: "The goal of the ADVANCE program is to increase the representation and advancement of women in academic science and engineering careers, thereby contributing to the development of a more diverse science and engineering workforce" (Program solicitation).

[2] http://wiseli.engr.wisc.edu

**Table 1: LCRG Applicant and Grantee Information**

| Application Deadline | # of Apps. | # of Awards | Grantees | Grantees' Circumstances |
|---|---|---|---|---|
| 11/29/02 | 2 | 2 | 1 female Assistant Professor | Sick child, new baby, new hire |
| | | | 1 male Professor | Major surgery |
| 3/31/03 | 6 | 2 | 1 female Assistant Professor | Spousal care, care of child |
| | | | 1 female Associate Professor | Major illness |
| 3/31/04 | 6 | 3 | 1 female Assistant Professor | Care of child, change in marital status |
| | | | 1 female Associate Professor | Change in marital status, department change, care of child |
| | | | 1 female Assistant Professor | Care for dying parent combined with care of two young children |

The LCRG program is financially supported by the original WISELI grant, along with supplementary money from The Graduate School in order to extend these grants to men and to more awardees (see Table 2).

**Table 2: LCRG Program Funding Sources and Amounts[3]**

| Year | WISELI | WISELI Indirects | The Graduate School | TOTALS |
|---|---|---|---|---|
| FY 2003 | 14,957 | 5,861 | 14,305 | **$35,123** |
| FY 2004 | 60,276 | 24,722 | 28,717 | **$113,715** |
| FY 2005 | 60,732 | 27,343 | 26,658 | **$114,733** |
| FY 2006 | 13,329 | 5,054 | - | **$18,383** |
| **TOTALS** | **$149,294** | **$62,980** | **$65,680** | **$281,954** |

In order to understand the implementation of and impact of these grants on the recipients, evaluation activities were undertaken in 2003 and 2004. In June through August of 2003, formative evaluation of the implementation of the grant program was completed. In February through May of 2004, summative evaluation of the impact of these grants was completed with the initial four grantees. This report chronicles the results stemming from these two evaluation activities.

[3] Includes tuition payments. No indirects paid for funds awarded through The Graduate School. For FY 2003 and FY2004, amounts given are ACTUAL funds spent; for FY2005 and FY2006, amounts are AWARDED amounts.

## Formative Evaluation of the LCRG Program

As a means to understand the implementation of the LCRG grant program during its first year (2002-2003), email surveys were sent to the Principal Investigators and Executive Director of WISELI, and to the two members of the WISELI Leadership Team who reviewed applications and made recommendations about who should be awarded the grants. These five individuals were asked to reply to the following questions:

> 1) In your opinion, what was the original intent of WISELI's Life Cycle Research Grant program?
> 2) Related to Question 1, who was the grant intended to serve? For what types of "life transitions?" What was the grant money to be used for?
> 3) Were the applications consistent with the original intent of the LCRG program? Please explain your response.
> 4) Were the awardees of the grants consistent with the original intent of the program? Please explain your response.

From the responses to these questions, along with an independent document and website analysis by the WISELI evaluation staff, the following conclusions and recommendations were made to the WISELI Principal Investigators and Executive Director in August 2003.

Formative Evaluation Conclusions

The following discrepancies and similarities were found when comparing the descriptions of the Life Cycle Research Grant program from the original grant proposal[4] and WISELI's call for proposals[5] on the website:

a) Being between grants is listed in the original grant proposal as an example of a "personal life event" deserving of additional monetary support, but the call for proposals does not mention that circumstance.

b) The original grant says the Life Cycle Research Grants will be available to women faculty while the call for applications says the grants will be available to faculty and permanent PIs (with sex not being a factor).

c) Both the grant proposal and the call for proposals mention life circumstances of a new baby and parent care responsibilities.

In light of these discrepancies, along with experiences of the reviewers of the applications, PIs and Executive Director, the following conclusions were also made:

[4] "Research grants will be available to women faculty at critical junctures in their professional careers (e.g. between grants, a new baby, parent care responsibilities). These grants are meant to be flexible and women may apply for varying amounts and academic purposes." (p.18)

[5] "These funds will be available to faculty and permanent PIs at the University of Wisconsin-Madison who are at critical junctures in their professional careers when research productivity is directly affected by personal life events (e.g., a new baby, parent care responsibilities, a life-partner's illness, one's own illness)."

d) The term "critical junctures" may be too vague because there were different perceptions of what this meant. Some thought it was applicable to junior faculty who were trying to achieve tenure, while others thought it was applicable to anyone at any point in their career. This led to discrepancies between people's priorities when awarding the grants.

e) There is no discussion of a difference between a "personal life event" and a "critical career juncture" in the ADVANCE grant proposal, but the call for proposals and all interviewees recognized a clear difference in the two circumstances and that a combination of both contributed to an applicant's need for the award.

f) Some emphasized the "critical juncture" piece of the requirements over the "personal life event" piece of the program, while others did the opposite. For some it was more important that the stress was occurring at a critical point in one's career (e.g., the birth or adoption of a child while trying to achieve tenure); for others it was more important that the event was stressful but not necessarily occurring at a critical place in one's career (e.g., a senior tenured faculty who has become ill). The grant does not separate these two, but the call for proposals states that the awards are for those at critical junctures in their professional careers when research productivity is directly affected by personal life events. In other words, the two need to occur simultaneously.

g) There were differences in people's perceptions of whether these grants were intended for people going through the typically expected stress of having or adopting a child and having extra care-giving responsibilities, or for people dealing with major unexpected stresses such as illnesses. One who felt the grant should be for childcare-related events felt that this particular emphasis is what sets the Life Cycle Research Grants apart from other grants that other campus organizations could provide. Also, there were differing viewpoints about whether having or adopting a child was a life event that warranted monetary support, or whether it was just a normal life event that many people deal with and therefore, not worthy of extra funding.

h) There was some resistance to awarding grants to those who were having or adopting a child because these applicants only predicted a future need of money to cover upcoming care-giving duties. It was obvious that those with immediate problems would be more deserving of the grants, so no grants were given to applicants with babies who had yet to arrive.

<u>Formative Evaluation Recommendations</u>

Based on the respondents' comments and observations about the implementation of the LCRG program, the following were recommended:

1. There needs to be a set of criteria for choosing the awardees of these grants, with priorities clearly stated. It would be ideal for those within in the WISELI program and reviewers of the applications to agree upon and state whether there is more importance associated with the "critical career juncture" or the "personal life event."

2. The reviewers need to consider how these two events, in combination, affect one's research agenda.
3. There needs to be evidence within people's applications as to why they do or do not deserve the grant and in turn, do or do not receive an award.
4. WISELI needs to remove the suggestion of the birth or adoption of a child as a "personal life event" from the call for applications because it will typically not enable someone to receive one of the grants. Still, something needs to be done for the people whose research agenda is being affected by the arrival of a child at a critical juncture in one's career.

From these recommendations, the WISELI staff made the following change to the second sentence in the "Call for Proposals," as found on the WISELI website for years 2003-2004 and 2004-2005.

> In collaboration with the Graduate School, WISELI (the Women in Science & Engineering Leadership Institute) is pleased to announce the Life Cycle Research Grant Program. ***These funds will be available to faculty and permanent PIs at the University of Wisconsin-Madison who are at critical junctures in their professional careers when research productivity is directly affected by personal life events (e.g. complications from childbirth, parent care responsibilities, a life-partner's illness, one's own illness).*** These grants are meant to be flexible and faculty may apply for varying amounts and academic purposes.

Further, written summaries were created to identify "life events" and "career junctures" of each of the applicants. The reviewers also noted why particular applicants received first priority and why they were ultimately awarded grants over others.

## Summative Evaluation of the LCRG Program

In the spring of 2004, the four recipients of the grants of the first two rounds of the grants agreed to participate in in-depth interviews. Each interview was held in the recipient's office and standard human subjects protocol was followed (i.e., signed informed consent, discussion of the use of the data, confidentiality and anonymity guarantees). During the interviews, the following questions were asked:

1) General question about life event – how are they/their children/spouse doing?

2) To what extent did the funds enable you to continue your research project(s)? What hindered or supported this process?

3) To what extent did the funds assist you in making significant progress in your research and/or enable you to obtain additional funds that would support your research beyond the scope of the grant? What hindered or supported this process? (Ask for specific examples – publications, presentations, grants awarded, etc.)

4) If the life event negatively influenced your career path, to what extent did the funds help you to re-align with that path? What hindered or supported this process?

5) Did the life event put you at risk for leaving UW-Madison? To what extent did the funds help you to stay at UW-Madison?

6) What would you have done if you had not received the grant during the situation?

7) What do you think the university/department could/should do to help faculty during major life cycle events?

8) Do you think this is a program that should be continued?

9) Relative to other programs for women faculty on campus, where do you think this program falls in terms of value?

10) Have you told others about this grant? How do you describe it? How is it perceived? By department? Colleagues?

11) Were there other positive or negative outcomes that occurred as a result of the funds received? If so, what were they?

12) Are there others in your department or elsewhere who can attest to the impact that this program has had on you and the UW? May I interview them?

Each of the interviewees agreed to be audiotaped, and the recordings were subsequently transcribed. The text of their responses was coded using a qualitative analysis software program[6], and was analyzed into thematic areas. From the interviewees' responses, five overarching themes were identified as impacts of this grant on both their personal and professional lives, on other peoples' lives and on the University. Further, they had much to say about the program's overall use and value. And, in subsequent discussions and email, each provided documentation about the publications, presentations, and grant proposals that are directly attributable to the time they were supported by the LCRG program.

Impact of the Life Cycle Research Grant: Overarching Themes

The following themes and illustrative quotes reflect the positive impacts of the grant on the awardees. To say all felt the same way about each of the themes would be incorrect, as every individual's case had different variables, contexts, and consequences. It is accurate to say that each of the following themes stem from comments and experiences identified by most, if not all, of the interviewees.

I began each of the interviews with a general question about the life situation that instigated the interviewees' application for the grant. In each case, their own or their child's health had improved and all felt their lives were "on the upswing." In general, their professional lives

[6] ATLAS.ti: www://atlasti.de

improved in tandem with their personal lives. In each of these themes, one reads how the personal and professional are interwoven and how the grant has affected each.

- *The Only Grant of Its Kind*

The recipients of the LCRG grants immediately noted that this was the only type of grant that validated peoples' personal lives and recognized how "suffering" can impact their professional lives. In the interviewees' opinion, this is what made the grant extremely valuable, as noted by Andrew[7]:

> *Because of the nature of the program, you help people that suffer somehow. I would say that the value of this program is greater than other programs, because you help people to cope with tragedy. So emotionally, it's important . . . I'm not aware of any program that I would be able to apply to on campus justifying my request based on health-related issues. I think you are the only program of this kind. And I'm not aware of any programs like yours in other institutions . . . Typically people don't give a damn about health. If you're sick, then you go.*

Mary's comments resonated with Andrew's:

> *There are no grants that I can apply to that are geared towards this kind of situation. Everything is about science. I did look for grants, small, big, large – everything is about the merit, the scientific merit, but behind the scientific merit is a person. A person has a life and that life can change . . . If I hadn't gone through this, I would not even think that [this type of grant is] necessary, because if you go into science, you're expecting the tough times. Especially at the beginning of career, because you're fighting for recognition . . . I felt like this is something [that happens] once in your lifetime . . . So I was really lucky [with the timing] because one year earlier, I wouldn't have had the grant.*

The interviewees attributed "the culture" at the UW and in the United States as one of the main reasons why there are no mechanisms to deal with people's personal situations. For example:

> *In American culture, people don't talk about their illnesses . . . You have to project yourself in America as a strong, healthy woman or man . . . I grew up in a different culture, where people are not shy about speaking about their illnesses. So, you would have to change the culture.*

Andrew continued:

> *Well, there's a lot of suffering and, the fact that this program exists essentially identifies cases that need to be solved. So, it is hard to exaggerate – this program is very important whether you want to keep it private or not. In American culture, this needs to be kept private because you can hurt a lot of people.*

[7] All names are pseudonyms.

Susan talked about how the culture in the University had played a part in her covering up the issues she was facing at home:

> *Initially, when I first was dealing with my life event, some of my colleagues were not very supportive, they didn't understand what was going on and they were criticizing me that I wasn't here on Saturdays. There's kind of a culture of, you know, everyone has this set of expectations and we expect everyone here on Saturday. That did not come from my Chair, it came from some of my colleagues in my department. And, that was rather distressing . . . I was told, 'well, just rely on your partner.' This came from men whose wives are at home, where it's much easier to rely on their partners . . . I think there's a lack of realization that it is a bit different to be a woman than to be a man, even with all the efforts at equality in raising children – it still falls pretty heavily into the mother's domain [especially with a partner who is ill].*

She continued:

> *I think it's just that they didn't understand that their situation and my situation were very different and that I needed a certain kind of support that they didn't need and for them to assume that I could live under the same schedule was ridiculous . . . And yet I would come in at nine at night and work until two in the morning here, and those same people weren't here. It's just that I wasn't here on Saturday because that's when I'm with my son . . . I'm not sure if the university can do much, other than thinking carefully about the culture that's promoted in terms of how people are judged.*

After receiving the grant, she felt uncomfortable publicizing it because of the "stigma" she already felt:

> *I felt that there was a stigma. So I was a little concerned that there would be the impression that because I had these things going on in my personal life to deal with, and because I'd already been criticized for not working on Saturday and my grants hadn't been funded yet, that there would be this impression that I was not going to be able to cut it. I had the sense that I needed to present a strong front to certain, critical members in my department and to have a sense that they have confidence in my ability to succeed.*

From the perspectives of the interviewees, the "culture" significantly affected how they coped with their personal situations and their professional lives. They noted that there are no mechanisms at the UW to address situations similar to theirs, as Mary commented:

> *There's no mechanism [on campus] . . . this is the first mechanism I have ever heard about to support women and men in a crisis like this. I mean, the department has some overhead money that kicks back every year, but everybody's looking at that money so they can buy some equipment for their own lab, it's all usually divided by the whole department. There's no mechanism to say, you've got faculty in a crisis, we'll set aside some money to support this professor for another year by taking some of this overheard money and giving it to her so she can continue. There was no mechanism like that, and*

*nobody has suggested that either. And so the impression I had is, 'tough it out, otherwise don't stay here.'*

Mary applied for various other grants, as a way to "tough it out." She was in the mode of writing grants based on scientific merit when she read about the WISELI Life Cycle Research Grant "Call for Proposals" in an email. Once she realized that this program applied to her, she sat down to write the application:

*I always write grants for scientific stuff – this is a grant for personal stuff, and I couldn't write it! I had to sit there for a couple of hours. I said, 'how do I start this?' You know, this is something very personal, it's not just, this is what I'm going to do, scientific things. This grant is kind of intertwining your life and your science career. It was very hard to write – there's no template. So, yeah, I sat there for a couple hours just blank, I was just blank.*

Mary's struggle when writing the application did pay off, as she did get funding through the LCRG program. Both she and the other grantees were very willing to continue to describe how this grant has impacted them, both personally and professionally.

- *It Came at a Critical Juncture in their Personal and Professional Lives*

Mary and Susan were both Assistant Professors and at the early stages of the tenure process; Karen was recently denied promotion to Professor, which she attributed to a lack of productivity due to her health issues; and Andrew was attempting to maintain a lab and his cutting-edge research. In general, each was at a "critical career juncture" in his or her life when their individual crises emerged. A few even admitted that they were at risk of leaving the University, academia, or the world, altogether.

Mary was concerned about achieving tenure and if she had made the best choice in being a faculty member:

*Because every three years they do renew your contract. And I was really afraid because I didn't have publications, I didn't have any external grants, and it's really frightening for anybody on tenure track after one and a half to two years, do you have anything to show for it? They hire you on this hope that you can bring a million dollars in, publish five papers a year, and it was really frightening. At times I doubted, should I have children and have come here, because the previous faculty job I had was teaching, mostly teaching, I can do that even with sick kids. I can teach, because you don't have to be there every day. As a major research professor, you really have to be here every day because there are constant technical questions that you have to answer for your student or your lab tech. So, I had to be here every day. And that made it really difficult for me at the time. And I would think, if I had stayed in Iowa for my first job, I wouldn't be so afraid of tenure.*

She continued:

> *I didn't feel I could make it. So I probably would have started to draw a backup plan and apply a teaching position within a year or so . . . I'm not drawing any backup plan now, because I'm very optimistic. But, if I didn't [get the grant] I probably would have abandoned the research position and go for teaching.*

Susan felt as if the grant was one of the things that helped her to "realign" her career path:

> *The life event certainly affected my productivity in publishing papers and that was coming back and affecting my ability to get grants. And so I think it did delay me getting my lab established and recognized in the field nationally, which has really happened with this last paper that we got published . . . But now in the last meeting I went to, I noticed that people in my field are now recognizing that my lab's up and running, and I'm publishing, and all of a sudden there was a difference of, okay, she's making it . . . I really think it was because of the life event and the things I was doing with my partner that delayed that. I think the grant helped me realign by being able to get the paper out, showing that yes, I'm publishing, we're going to be successful, I'm going to do fine now. I'd say the grant came at a time when I was rearranging my whole life, and so, um, everything contributed to getting things back on track.*

When asked if the life event put her at risk for leaving the UW and how the grant affected her decision, she answered:

> *I guess if I had dropped out entirely and stopped being a faculty member. But it didn't put me at risk to go to another institution. I think it was more just dropping out of the whole academic life entirely. So, from that standpoint, [the grant] did help me stay, I think it helped me be successful so I'll get tenure and I can stay.*

Karen, on the other hand, had tenure but had been recently denied a promotion:

> *My [issue] was related to the fact that I couldn't get things done as fast as I wanted to and therefore, I was denied full professor . . . Right now I've got so many things in the works that I'm hoping that they're going to look at [my promotion package] differently when I go up. [The grant] really helped this process, more so than leaving, the process of trying to get full professor . . . I'll probably go up again next spring.*

When asked if he was at risk for leaving the University, Andrew laughed and said, "well actually, the world." His situation was life-threatening and in his case, leaving the University was the least of his concerns. Having an already-established lab and being a full professor did put him in a different category from the rest of the awardees. At the same time, he admitted it was impossible to "exaggerate" the benefits of this grant on his health and psychological well-being during the time of his illness.

- *The Grant Provided Psychological Support*

All four of the grantees talked about how the grant provided the needed psychological "boost" to stave off depression and further deterioration in their health. When discussing some of their experiences, the grantees used words such as "desperation," "depression," "fear," and "downhill spiral." Receiving the grant motivated them and made them feel that they could get over the "hump" they had been facing.

Mary described this:

> *[The grant] kept my hope up . . . I was desperate. I was desperate because I knew I was lacking hands to work in the lab, not lacking ideas. But the situation with my family just totally put everything on hold, I wasn't able to concentrate enough to do everything. [My daughter] was hospitalized so much and she needed so much, and we didn't have immediate family around us . . . So, the grant actually gave me a little bit of hope that I would keep my momentum. Otherwise, I think it would be a downhill spiral. At that moment, the grant pulled me up, so that prevented me from sliding further down in my career path. I was really afraid I wouldn't be able to make it to tenure, or even to extend my contract.*

Others also talked about how this grant was different – it helped them to "reverse the momentum" and was a "life raft:"

> *I strongly support this program . . . it's not a huge amount of money, for anybody, but it really reverses the psychological effect of the life event. It reversed that trend of doubting – that's really dangerous because if you start to doubt your choices, you start to lose your drive. You cannot be driven at the same time that you doubt it. Either you're driven or you doubt it and you quit. So I strongly recommend this to be continued and I hope people in my situation in the future will be able to have the same kind of support.*
>
> *****
>
> *This is really different, this is a completely different mechanism . . . It's a crisis line, you know, it's a lifeline, a life raft. That one year was critical, and if I didn't have the [grant] then I probably would say, 'I can't make it, and I'm leaving.'*

Clearly, the grant had far-reaching impact on both their current situations, as well as their futures. At the same time, the grants enabled the recipients to support personnel in their lab or provide new opportunities for grad students and post-doctoral fellows. The following theme describes some of these impacts.

- *Impacts on Others' Lives, as Well*

The grantees described how they would have had to dismiss key people in their labs. Andrew noted:

> *Without these funds, I would have had to let the key person in my lab go. Her salary was covered in full, I believe, by WISELI. She's the key to the lab, because she was essentially managing the lab when I was recovering . . . It's very hard to exaggerate how much this support meant to me. What it still means to me.*

With the funds, they were able to hire managers (like Andrew), graduate students, post docs, and/or limited-term employees to complete a specific service for them. Further, most of the personnel who were hired with the grant funds have co-authored or published with the grantees. Without the funds, the interviewees noted that they would have had to be "fiscally irresponsible," which would ultimately impact them and the other people in their labs.

Susan described how she would have handled life without the grant:

> *I probably would have been more fiscally irresponsible – I would let a certain amount of debt acquire. Which then, if I get another grant, automatically you're starting behind on it. But I certainly would not have hired undergraduates to help out in the lab, to help out doing dishwashing. And I would have probably been more cautious about, buying reagents that we really needed for doing the experiments and we probably would have tried to skimp on things. But sometimes, that's counterproductive. You're trying to skimp on something, but the experiments then don't work as well and you end up spending longer doing them, or rather than buying something that helps you do it quickly you do it a more old-fashioned way that takes longer and so I think we might have done some of those kinds of things. It might have slowed the progress a little bit. It's hard to put a value on that.*

Ultimately, the grantees recognized that without the extra help – in personnel, buy-out time, or other resources – they were stuck in a vicious cycle of not getting research done, not publishing, and so on. Karen described this:

> *I applied for the money to give myself some time in the summer to work on research projects. And that was invaluable, because I was able to get a manuscript out. And, I was hoping to get two, but I managed to get one out and one in draft form, so I was pleased with that, but the biggest help was the project assistant. I hired this fellow from engineering to write software for me and convert all the software that I had in my lab, which is old and written in BASIC, into this new form called Lab View, which is a graphical form of software development . . . So now we can easily go onto the computer, use Lab View for almost any type of setup we have, and that just saved a tremendous amount of time, because he developed a program for one, two, three, three different projects, and, and they're generic enough that you could use them for other projects as well by just tweaking them a little bit. He also participated in data collection with another grad student – the two of them helped me collect data on [my field of research].*

Mary also needed the "extra hands" to allow her to collect data and write manuscripts, which allowed her to also develop grant proposals:

> *I was having such a difficult time in my life, I was not being able to work in the lab, imagine that! So I desperately needed someone that could come in and work in the lab on a daily basis to generate data. And even though I was writing grant proposals, in the back of my mind I knew it was not good enough, because I didn't have enough preliminary data. And so it was tremendous help that, [the grant] enabled me to hire a full-time person working in the lab . . . a technician that could be here five days a week, eight hours a day, and that really generated the momentum. That's why I was able to finish papers. I can either do the work in the lab or write papers – it's a catch-22! You write a paper, you can't do the work, you're working, you can't write a paper! So I wasn't be able to write many papers at all, until the technician come in, then I can say, 'okay, you work in the lab, don't worry about the data, I'll analyze the data.'. . . Within a year and a half, I generated four papers.*

The interviewees described themselves in "catch-22" situations and were only able to get beyond them with extra help. All admitted that the actual funding was relatively low compared to the pay-offs they received from the grant. This last section describes how the initial investment reaped great rewards for the recipients and the University.

- *An Investment in the Grantees' Futures and the University's*

The recipients verbalized many pay-offs, both short- and long-term. These were described qualitatively, as reflected in their comments found in previous sections, as well as quantitatively, as seen in Table 3.

**Table 3: Grantee Information about Publications, Presentations, and Grant Proposals**

| Grantee | Number of Publications | Number of Presentations | Number of Grant Proposals | Amount Requested in Grant Proposal(s) | Amount Received |
|---|---|---|---|---|---|
| 1 | 4 | 2 | 1 | $1,024,645 | Pending |
| 2 | 7* | 0 | 2 | $3,589,998 | -0- |
| 3 | 1 | 2 | 2 | $289,083 | $239,127 Pending |
| 4 | 1 | 3 | 3 | $1,225,000 | All Pending |
| **TOTALS** | **13** | **7** | **8** | **$6,128,726** | **$2,488,772 Pending** |

This table reflects the number of publications, presentations, and proposals that the first four recipients of the LCRG directly attributed to the work completed during the funding year of the

* Five are in press or published; 2 are in preparation/submission stages.

grant. If all of the pending grant proposals were funded, the original investment of approximately $282,000 (for 7 awardees) would have a return rate of almost 1000% for these four grantees. Even if a fraction were funded, the pay-offs would be significant.

The interviewees described their understanding of this. Susan noted:

> *[With other grants] you're competing on a national level on everything, and I think that's fair, but you are at a disadvantage because you just don't have the time and energy at the same level as perhaps other people and so it just gives you that little bit of, little extra money to get things pulled together – have another person, have more reagents, have more whatever you need to have your grant be competitive. I also think it's a good idea because of the investment value. If I get my grant, it's going to pay off for the university several fold over.*

Mary concurred:

> *It's really unique to give [a grant] during a very difficult time of a person's career. And the person could turn out to be, in five years, a big star for the university . . . I'm not saying that I'm going to be a star, but I could be. And, and who is to say that the thirty-two thousand dollars that was spent . . . it's really a drop in the bucket, but it really helps the most fundamental part of the university, which is research and teaching. If you can't keep faculty, you can't get good faculty to stay here, then you lose your prestige as a university. We come here because it's a prestigious university. We believe our colleagues are stars in the field. And if we don't have that belief, we wouldn't be here. So I hope the university will want to keep us here, and develop some mechanism to help us. So I would strongly support this program, even one case a year. If that one person really was drowning. This is a lifeline.*

Mary goes on to further describe how she would financially support the program in the future:

> *If I get tenured and the University asks for donations, I will donate money to this particular program, not to the university as a whole . . . I wouldn't mind doing that because [this program] is critical.*

From these comments and the table, one comes to understand the value of the program to the recipients and to the University. Follow-up discussions will occur with these recipients in 2005, as well as the three recent awardees, to identify any other significant and long-lasting impacts on their professional lives at UW-Madison.

## Conclusions

The investment in these scholars has led to significant outcomes for themselves and the University. For example:

- The recipients were able to mitigate the negative affects of their personal situations through the funds available by the grant;
- The grants provided them with the necessary resources to maintain and extend their research programs;
- The grantees were able to hire staff to be the managers, data collectors, etc., which provided graduate students, technicians, and postdocs research opportunities;
- The grantees were able to be productive, as seen in the number of publications, presentations, and grant proposals that were written;
- The interviewees were unable to identify any negative impacts from receiving the grants.

In conclusion, the four awardees are extremely grateful for the program, the resources they received and the motivating influence the grants provided. They offered to provide "testimony" as a means to further support the program and perhaps enable others to receive similar funding. From our evaluation of the program, seeking funds to continue the program will be a worthwhile endeavor, as there are many faculty and academic staff who would be worthy of this type of support.

*"If I get my grant, it's going to pay off for the university several-fold over."*

The Life Cycle Research Grant Program and its resounding success at helping faculty members maintain their research programs in the face of personal crises provide the University with a valuable means of retaining a world-class faculty. How can we ensure that all UW-Madison faculty have this lifeline available should they ever need it?

## Help the Life Cycle Research Grant Program Continue into the Future

WISELI is raising an endowment that will ensure that this program will remain a permanent part of the UW-Madison commitment to faculty. Based on the number of proposals received and the eventual number of grants awarded, WISELI proposes funding 10 Life Cycle Research Grants per year. In order to generate an average individual grant amount of $32,000, an endowment of $6,400,000 is needed.

*"If I get tenured and the university asks for donations, I will donate my money to this particular program... I wouldn't mind doing that because this program is critical."*

If you would like to contribute, please contact:

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http://www.uwfoundation.wisc.edu

*"I would say that the value of this program is greater than other programs, because you help people to cope with tragedy."*

Reference:

Maidl Pribbenow, C. & Benting, D. (2004). *WISELI's Life Cycle Research Grant Program: Formative and Summative Evaluation.* Madison, WI: WISELI.

All quotes in this publication taken from interviews with WISELI's Life Cycle Research Grant recipients.

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

http://wiseli.engr.wisc.edu

GRADUATE SCHOOL
University of Wisconsin-Madison

http://www.wisc.edu/grad

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# Life Cycle Research Grant Program

*"This is a completely different mechanism ... It's a crisis line, a lifeline, a life raft."*
- Assistant Professor and Life Cycle Research Grant Recipient

THE UNIVERSITY of WISCONSIN MADISON

## Challenges of Having a Career in Academia

A faculty position at UW-Madison is an all-consuming career! Faculty often devote more than 80 hours per week to research, teaching, and service. Their dedication to excellence in teaching and research is what makes UW-Madison a world-class university.

*"There's no mechanism to say, 'You've got a faculty in a crisis. We'll set aside some money to support this professor ... so she can continue.' And so the impression I had is, 'Tough it out, otherwise don't stay here.' "*

Such a busy career leaves little room for activities outside of work, and poses extreme challenges for coping with devastating life events. No one is immune to a variety of difficult circumstances such as:

- a personal health crisis,
- complications from child birth,
- the need to care for a terminally ill parent,
- a child's critical illness, or
- a life partner's critical illness.

A personal crisis can often severely disrupt work activities and threaten a faculty member's ability to apply for and/or receive necessary grants. If the crisis strikes at a critical career juncture, faculty members are especially vulnerable to leaving the University, and sometimes academia altogether:

- Just one gap in the grant flow can be disastrous to a research program and can often affect an entire research team.
- A brief lapse in productivity can have a detrimental effect on a junior faculty member's ability to achieve tenure.

*"If you can't get good faculty to stay here, then you lose your prestige as a university. We come here because it's a prestigious university. We believe our colleagues are stars in the field. And if we didn't have that belief, we wouldn't be here. So I hope the university will want to keep us here, and develop some mechanism to help us."*

## Protecting People, Protecting the University's Investment

UW-Madison makes a considerable investment in each faculty member. Believing that each faculty member hired has excellent potential to contribute new knowledge to his or her field, the University provides faculty with start-up funds to establish a research program, and expects faculty to successfully apply for external grants that will sustain a research program for the duration of one's career.

Photo by Jeff Miller; Courtesy of UW-Madison University Communications

Recognizing and solving the problems created by personal crises would allow the University to:

- protect its initial investment in each faculty member and
- enable faculty members to achieve the potential for which they were initially hired.

## History of the Life Cycle Research Grant Program

A grant from the National Science Foundation allowed the Women in Science & Engineering Leadership Institute (WISELI) to support faculty members through distressing times that affect research productivity. In partnership with the UW Graduate School, WISELI piloted the Life Cycle Research Grant Program.

Launched in 2002, this unique program began providing funds to faculty and permanent principal investigators who were at critical career junctures and dealing with a major life event. Unlike most grants, which are awarded on the basis of academic merit, the Life Cycle Research Grant awards were based more heavily on personal need.

*"The grant actually gave me a little bit of hope that I would keep my momentum. Otherwise, I think it would be a downhill spiral. At that moment, the grant pulled me up, which prevented me from sliding further down in my career path. I was really afraid I wouldn't be able to make it to tenure, or even to extend my contract."*

## Success!

Over the course of two years, seven faculty members in crisis received much-needed awards ranging from $22,000-$43,000 (average $31,000). An evaluation of the program shows that the awards benefited both the individuals who received them, as well as the University. The grant funds have allowed the recipients to:

- ease the negative effects of their personal situations,
- maintain their research programs,
- hire and provide research opportunities to graduate students, technicians, and postdocs, and
- be productive, generating a number of publications, presentations, and grant proposals.

*"That one year was critical, and if I didn't have the grant then I probably would say, 'I can't make it, and I'm leaving.' "*

# **WISELI Evaluation and Research Status Report:**
Workshops for Search Committee Chairs

# WISELI Evaluation and Research: Status Report

## *Search Chair Workshops*

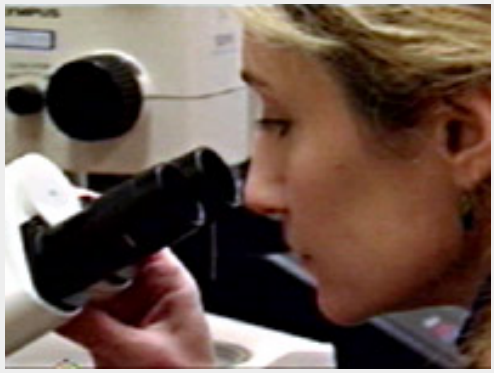
| College, School or Department | Presenters & Facilitators | Number of Participants | Date of Workshop(s) | Number of Sessions |
|---|---|---|---|---|
| PILOT Session | Bernice Durand | 4<br>3<br>7 | 7/23/03<br>8/20/03<br>8/27/03 | 3 |
| Medical School | Molly Carnes<br>Rosa Garner | 7 | 7/07/04 | 1 |
| Medical School | Molly Carnes<br>Rosa Garner<br>Paul DeLuca<br>Luis Pinero<br>Pauline Thome<br>Eve Fine | 13 | 10/15/04 | 1 |
| College of Engineering | Jo Handelsman<br>Paul Peercy<br>Phil O'Leary<br>Chris DeMarco<br>Luis Pinero<br>Sarah Pfatteicher<br>Molly Carnes | 17 | 9/15/04 | 1 |
| All Campus | Bernice Durand | 7 | 10/11/04 | 1 |
| CALS | Jo Handelsman | 8 | 10/20/04 | 3 |
| All Campus | Bernice Durand | 5 | 10/22/04 | 1 |
| All Campus | Bernice Durand | 2 | 10/25/04 | 1 |
| All Campus | Bernice Durand | 4 | 11/03/04 | 1 |
| | **TOTALs** | **72** | | **13** |

# The Research Channel

WISELI: Year One

Find Programs:
- Program Title
- Series Title
- Institution
- Subject
- New Releases

# Women in Science and Engineering Leadership Institute: Year One



This documentary on the Women in Science and Engineering Leadership Institute, based at the University of Wisconsin - Madison, captures the first year of a five-year National Science Foundation-funded effort to investigate why such a small percentage of faculty in the biological and physical sciences are female. The documentary looks back on the remarkable efforts of UW-Madison administrators and women faculty over the years to enhance the working environments of women scientists and engineers, and shows how WISELI is currently using the campus as a living laboratory to study and test interventions expected to have a positive effect on the advancement of women in science and engineering.

Production Company: Eclipse Multimedia Productions, Madison WI

Series: **University of Wisconsin - Madison Presents, The**

| | |
|---|---|
| Speaker: | **Jo Handelsman**, Howard Hughes Medical Institute Professor of Plant Pathology and Co-director of WISELI, University of Wisconsin-Madison<br>**Paul Peercy**, dean, College of Engineering, University of Wisconsin-Madison<br>**Katharine Lyall**, President, University of Wisconsin System<br>**Janet Hyde**, Helen Thompson Woolley Professor of Psychology and Women's Studies; former associate vice chancellor, Academic Affairs, University of Wisconsin-Madison<br>**Judith Leavitt**, Ruth Bleier Professor of History of Medicine, University of Wisconsin-Madison<br>**Alice Hogan**, program director, ADVANCE, National Science Foundation<br>**Mariamme Whatley**, professor and chair, Women's Studies Program; associate dean, School of Education, University of Wisconsin-Madison<br>**Jennifer Sheridan**, executive and research director, WISELI, University of Wisconsin-Madison<br>**Christine Maidl Pribbenow**, associate researcher, LEAD Center, University of Wisconsin-Madison<br>**Ramona Gunter**, research assistant and Ph.D. candidate, Department of Educational Policy Studies, University of Wisconsin-Madison<br>**John Wiley**, chancellor, University of Wisconsin-Madison<br>**Sue Rosser**, dean, Ivan Allen College, Georgia Institute of Technology<br>**Linda Greene**, Evjue-Bascom Professor of Law; associate |

vice chancellor, Academic Affairs, University of Wisconsin-Madison
**Molly Carnes**, Jean Manchester Biddick Bascom Professor of Medicine; Co-director, WISELI, University of Wisconsin-Madison
**Betsy Draine**, professor, English; former associate vice chancellor, Academic Affairs, University of Wisconsin-Madison
**Peter Spear**, provost, University of Wisconsin-Madison
**Sue Daffinrud**, associate researcher, LEAD Center, University of Wisconsin-Madison
**Patrick Farrell**, professor, Mechanical Engineering; associate dean, Academic Affairs, College of Engineering, University of Wisconsin-Madison
**Virginia Valian**, professor, Department of Psychology; P.I., Hunter College ADVANCE Grant; author of "Why So Slow? The Advancement of Women", City University of New York-Hunter College

Subject: Sciences

Related Link(s): WISELI

Produced by: University of Wisconsin - Madison, January 30, 2004

Runtime: 00:31:38

Rating: TV-G

**Launch Video On-Demand**

**2004 Financial Report**

| | 2002 | 2003 | 2004 | Total |
|---|---|---|---|---|
| Income | | | | |
| NSF | $750,000 | $750,000 | $750,000 | $2,250,000 |
| Celebrating Grants | $6,000 | $13,365 | $4,000 | $23,365 |
| College of Engineering | $10,000 | $20,000 | $10,000 | $40,000 |
| Salaries and Fringes | | | | |
| Directors | $145,180 | $115,306 | $103,088 | $363,574 |
| WISELI Staff | $98,419 | $128,547 | $156,006 | $382,972 |
| Leadership Team | $69,725 | $143,700 | $61,618 | $275,043 |
| Evaluators | $88,261 | $72,110 | $57,076 | $217,447 |
| Travel | $9,758 | $9,637 | $15,291 | $34,686 |
| Supplies and Equipment | $17,972 | $12,348 | $12,757 | $43,077 |
| Initiatives | | | | |
| Celebrating Grants | $0 | $9,037 | $11,170 | $20,207 |
| Life Cycle Research Grants | $0 | $57,648 | $52,910 | $110,558 |
| Video | $12,169 | $5,160 | $7,079 | $24,408 |
| Survey | $0 | $33,381 | $0 | $33,381 |
| Book Giveaways | $1,756 | $395 | $0 | $2,151 |
| WISELI Seminar | $273 | $537 | $875 | $1,685 |
| Senior Women Development | $172 | $114 | $0 | $286 |
| Workshops | $2,015 | $1,085 | $1,377 | $4,477 |
| Chairs' Climate Workshops | $0 | $174 | $1,132 | $1,306 |
| Search Committee Chairs' Workshops | $0 | $382 | $1,142 | $1,524 |
| Awards Brochure | $0 | $0 | $305 | $305 |
| Overhead | $198,942 | $251,851 | $200,416 | $651,209 |
| Total Income | $766,000 | $783,365 | $764,000 | $2,313,365 |
| Total Expenditures | $644,642 | $841,412 | $682,240 | $2,168,295 |

**2005 Proposed Budget**

| | 2002-04 Total | 2005 Proposed | Total |
|---|---|---|---|
| Income | | | |
| NSF | $2,250,000 | $750,000 | $3,000,000 |
| Celebrating Grants | $23,365 | $10,000 | $33,365 |
| College of Engineering | $40,000 | $10,000 | $50,000 |
| Salaries and Fringes | | | |
| Directors | $363,574 | $100,000 | $463,574 |
| WISELI Staff | $382,972 | $160,000 | $542,972 |
| Leadership Team | $275,043 | $62,000 | $337,043 |
| Evaluators | $217,447 | $85,000 | $302,447 |
| Travel | $34,686 | $10,000 | $44,686 |
| Supplies and Equipment | $43,077 | $15,000 | $58,077 |
| Initiatives | | | |
| Celebrating Grants | $20,207 | $10,000 | $30,207 |
| Life Cycle Research Grants | $110,558 | $56,540 | $167,098 |
| Video | $24,408 | $15,000 | $39,408 |
| Survey | $33,381 | $0 | $33,381 |
| Book Giveaways | $2,151 | $400 | $2,551 |
| WISELI Seminar | $1,685 | $875 | $2,560 |
| Senior Women Development | $286 | $0 | $286 |
| Workshops | $4,477 | $1,500 | $5,977 |
| Chairs' Climate Workshops | $1,306 | $1,500 | $2,806 |
| Search Committee Chairs' Workshops | $1,524 | $1,500 | $3,024 |
| Awards Brochure | $305 | $500 | $805 |
| Overhead | $651,209 | $231,738 | $882,947 |
| Total Income | $2,313,365 | $770,000 | $3,083,365 |
| Total Expenditures | $2,168,295 | $751,553 | $2,919,847 * |

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

**Cost Sharing Summary (January 1, 2002 - December 31, 2004)**
**WISELI**

| | Certified Year 1+2 Total | Uncertified Year 3 (2004) | TOTAL Year 1 - Year 3 | *Estimate Year 4 (2005)* |
|---|---|---|---|---|
| Salaries & Fringe Benefits[1] | $49,573 | $34,303 | $83,876 | *$20,379* |
| Graduate Student support[2] | $45,079 | $28,899 | $73,978 | *$22,860* |
| Symposium support[3] | $12,245 | $10,970 | $23,215 | *$10,000* |
| WISE Program support[4] | $22,033 | $5,729 | $27,762 | *$5,729* |
| Other Program support[5] | $79,670 | $29,275 | $108,945 | *$45,316* |
| Indirect Costs | $91,423 | $47,433 | $138,856 | *$45,716* |
| Total Costs | $300,012 | $156,609 | **$456,621** | *$150,000* |

1-Includes faculty and staff salaries and fringe benefits for 2002, 2003 and 2004.
2-Graduate student support is for: 1 Research Assistant at 50% beginning 9/1/02 through 12/31/04; 1 Project Assistant at 50% beginning 9/1/03 through 1/31/04.
3-Funds for Celebrating Women in Science & Engineering Grant program.
4-Includes program support and undergraduate support for the Women in Science and Engineering Residential Program.
5-Includes funds for documentary video project, survey of faculty and academic staff, the Life Cycle Research Grant programs, and contributions towards equipment and supplies from the College of Engineering.

# Institutional Data, 2004

**Table 1. Number and Percent of Women Faculty in Science/Engineering by Department, 2004**

| Division/Department | Women | Men | % Women |
|---|---|---|---|
| **Physical Sciences** | **55.00** | **410.55** | **11.8%** |
| Biological Systems Engineering | 1.00 | 13.25 | 7.0% |
| Soil Science | 3.50 | 17.00 | 17.1% |
| Chemical & Biological Engineering | 1.00 | 17.00 | 5.6% |
| Civil & Environmental Engineering | 2.00 | 26.00 | 7.1% |
| Electrical & Computer Engineering | 5.00 | 38.25 | 11.6% |
| Biomedical Engineering | 3.00 | 6.10 | 33.0% |
| Industrial Engineering | 5.25 | 12.00 | 30.4% |
| Mechanical Engineering | 3.00 | 28.75 | 9.4% |
| Materials Science & Engineering | 3.00 | 14.00 | 17.6% |
| Engineering Physics | 1.50 | 19.50 | 7.1% |
| Engineering Professional Development | - | 7.00 | 0.0% |
| Astronomy | 2.75 | 11.00 | 20.0% |
| Chemistry | 3.50 | 35.00 | 9.1% |
| Computer Sciences | 4.00 | 29.00 | 12.1% |
| Geology & Geophysics | 5.00 | 15.00 | 25.0% |
| Mathematics | 3.25 | 50.25 | 6.1% |
| Atmospheric & Oceanic Sciences | 1.00 | 14.00 | 6.7% |
| Physics | 4.25 | 44.75 | 8.7% |
| Statistics | 3.00 | 12.70 | 19.1% |
| **Biological Sciences** | **171.56** | **596.44** | **22.3%** |
| Agronomy | 1.00 | 18.00 | 5.3% |
| Animal Science | - | 17.60 | 0.0% |
| Bacteriology | 4.00 | 14.00 | 22.2% |
| 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 | 1.50 | 12.00 | 11.1% |
| Horticulture | 3.00 | 11.50 | 20.7% |
| Nutritional Sciences | 5.00 | 5.50 | 47.6% |
| Plant Pathology | 6.00 | 9.00 | 40.0% |
| Forest Ecology & Management | 0.50 | 13.13 | 3.7% |
| Natural Resources - Wildlife Ecology | - | 5.00 | 0.0% |
| Kinesiology | 9.00 | 6.00 | 60.0% |
| Nelson Institute for Environmental Studies | 2.50 | 4.07 | 38.1% |
| Botany | 6.00 | 10.50 | 36.4% |
| Communicative Disorders | 8.00 | 6.00 | 57.1% |
| Zoology | 8.00 | 16.00 | 33.3% |
| Anatomy | 6.00 | 14.50 | 29.3% |
| Anesthesiology | - | 4.00 | 0.0% |
| Biostatistics & Medical Informatics | 2.75 | 7.25 | 27.5% |
| Family Medicine | 2.00 | 6.75 | 22.9% |

| | | | |
|---|---|---|---|
| Genetics | 2.50 | 4.99 | 33.4% |
| Obstetrics & Gynecology | 2.00 | 8.00 | 20.0% |
| Medical History & Bioethics | 2.50 | 5.90 | 29.8% |
| Human Oncology | 1.00 | 7.25 | 12.1% |
| Medicine | 9.00 | 55.89 | 13.9% |
| Dermatology | - | 5.00 | 0.0% |
| Medical Microbiology | 4.20 | 7.50 | 35.9% |
| Medical Physics | 1.00 | 13.15 | 7.1% |
| Neurology | 1.00 | 8.50 | 10.5% |
| Neurological Surgery | 1.00 | 4.00 | 20.0% |
| Oncology | 2.75 | 11.90 | 18.8% |
| Ophthalmology & Visual Sciences | 3.60 | 10.00 | 26.5% |
| Orthopedics & Rehabilitation | 1.00 | 11.50 | 8.0% |
| Pathology & Laboratory Medicine | 5.00 | 14.51 | 25.6% |
| Pediatrics | 8.75 | 13.20 | 39.9% |
| Pharmacology | 2.00 | 10.00 | 16.7% |
| Biomolecular Chemistry | 2.80 | 8.00 | 25.9% |
| Physiology | 6.00 | 17.00 | 26.1% |
| Population Health Sciences | 9.20 | 11.60 | 44.2% |
| Psychiatry | 7.51 | 9.70 | 43.6% |
| Radiology | 1.50 | 13.65 | 9.9% |
| Surgery | - | 27.00 | 0.0% |
| School of Pharmacy | 5.50 | 25.00 | 18.0% |
| Animal Health & Biomedical Sciences | 1.00 | 6.00 | 14.3% |
| Medical Sciences | 3.00 | 10.00 | 23.1% |
| Pathobiological Sciences | 1.00 | 13.00 | 7.1% |
| Comparative Biosciences | 4.00 | 10.00 | 28.6% |
| Surgical Sciences | 1.00 | 7.00 | 12.5% |
| **Social Studies** | **215.70** | **381.48** | **36.1%** |
| Agricultural & Applied Economics | 1.00 | 21.90 | 4.4% |
| Life Sciences Communication | 4.80 | 4.00 | 54.5% |
| Rural Sociology | 3.00 | 10.00 | 23.1% |
| Natural Resources-Landscape Architecture | 4.00 | 3.00 | 57.1% |
| Urban & Regional Planning | - | 3.00 | 0.0% |
| School of Business | 14.75 | 64.75 | 18.6% |
| Counseling Psychology | 4.00 | 4.00 | 50.0% |
| Curriculum & Instruction | 14.00 | 15.15 | 48.0% |
| Educational Administration | 3.75 | 11.00 | 25.4% |
| Educational Policy Studies | 5.00 | 7.00 | 41.7% |
| Educational Psychology | 5.00 | 11.00 | 31.3% |
| Rehabilitation Psychology & Special Education | 5.00 | 5.00 | 50.0% |
| School of Human Ecology | 23.20 | 13.00 | 64.1% |
| Law School | 12.50 | 28.25 | 30.7% |
| Anthropology | 7.50 | 14.00 | 34.9% |
| Afro-American Studies | 5.00 | 5.25 | 48.8% |
| Communication Arts | 10.00 | 12.00 | 45.5% |
| Economics | 4.20 | 23.75 | 15.0% |
| Ethnic Studies | 1.00 | - | 100.0% |
| Geography | 4.00 | 14.00 | 22.2% |
| LaFollette School of Public Affairs | 2.50 | 6.50 | 27.8% |

| | | | | |
|---|---|---|---|---|
| | School of Journalism & Mass Communication | 5.00 | 9.50 | 34.5% |
| | School of Library & Information Studies | 7.00 | 1.50 | 82.4% |
| | Political Science | 7.00 | 28.25 | 19.9% |
| | Psychology | 13.00 | 23.00 | 36.1% |
| | Social Work | 9.50 | 6.00 | 61.3% |
| | Sociology | 15.50 | 28.42 | 35.3% |
| | Urban & Regional Planning | 1.00 | 4.75 | 17.4% |
| | School of Nursing | 21.50 | - | 100.0% |
| | Professional Development & Applied Studies | 2.00 | 3.51 | 36.3% |
| **Humanities** | | **154.75** | **227.73** | **40.5%** |
| | Art | 11.00 | 18.00 | 37.9% |
| | 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 | 4.25 | 19.0% |
| | East Asian Languages & Literature | 5.00 | 6.00 | 45.5% |
| | English | 26.70 | 24.30 | 52.4% |
| | French & Italian | 8.00 | 14.25 | 36.0% |
| | German | 6.00 | 10.35 | 36.7% |
| | Hebrew & Semitic Studies | 3.00 | 3.00 | 50.0% |
| | History | 15.50 | 32.50 | 32.3% |
| | History of Science | 2.00 | 5.50 | 26.7% |
| | Linguistics | 4.00 | 4.00 | 50.0% |
| | School of Music | 14.00 | 32.50 | 30.1% |
| | Philosophy | 4.00 | 16.00 | 20.0% |
| | Scandinavian Studies | 3.00 | 2.00 | 60.0% |
| | Slavic Languages | 3.00 | 7.00 | 30.0% |
| | Languages & Cultures of Asia | 4.50 | 8.33 | 35.1% |
| | Spanish & Portuguese | 9.00 | 14.00 | 39.1% |
| | Theatre & Drama | 6.75 | 8.00 | 45.8% |
| | Women's Studies Program | 3.50 | - | 100.0% |
| | School of Library & Information Studies | - | 1.00 | 0.0% |
| | Liberal Studies & the Arts | 4.80 | 2.00 | 70.6% |

SOURCE: October 2004 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 : Margaret Harrigan, Office of Academic Planning and Analysis

February, 2005

**Table 2. Number and Percent of Women Faculty in Science/Engineering by Rank and Department, 2004**

| Division/Department | Women | | | Men | | | % Women | | |
|---|---|---|---|---|---|---|---|---|---|
| | Full | Associate | Assistant | Full | Associate | Assistant | Full | Associate | Assistant |
| **Physical Sciences** | **26.00** | **6.00** | **23.00** | **277.45** | **60.50** | **72.60** | **8.6%** | **9.0%** | **24.1%** |
| Biological Systems Engineering | - | - | 1.00 | 11.25 | 1.00 | 1.00 | 0.0% | 0.0% | 50.0% |
| Soil Science | - | - | 3.50 | 14.00 | 1.00 | 2.00 | 0.0% | 0.0% | 63.6% |
| Chemical & Biological Engineering | 1.00 | - | - | 8.00 | 4.00 | 5.00 | 11.1% | 0.0% | 0.0% |
| Civil & Environmental Engineering | 1.00 | - | 1.00 | 15.00 | 8.00 | 3.00 | 6.3% | 0.0% | 25.0% |
| Electrical & Computer Engineering | 1.00 | 1.00 | 3.00 | 22.25 | 9.00 | 7.00 | 4.3% | 10.0% | 30.0% |
| Biomedical Engineering | - | - | 3.00 | 2.50 | 1.00 | 2.60 | 0.0% | 0.0% | 53.6% |
| Industrial Engineering | 3.25 | 1.00 | 1.00 | 7.00 | 2.00 | 3.00 | 31.7% | 33.3% | 25.0% |
| Mechanical Engineering | 1.00 | 1.00 | 1.00 | 18.00 | 2.75 | 8.00 | 5.3% | 26.7% | 11.1% |
| Materials Science & Engineering | 1.00 | - | 2.00 | 9.00 | 2.00 | 3.00 | 10.0% | 0.0% | 40.0% |
| Engineering Physics | 0.50 | 1.00 | - | 11.25 | 3.25 | 5.00 | 4.3% | 23.5% | 0.0% |
| Engineering Professional Development | - | - | - | 2.00 | 3.00 | 2.00 | 0.0% | 0.0% | 0.0% |
| Astronomy | 1.75 | 1.00 | - | 8.00 | 3.00 | - | 17.9% | 25.0% | N/A |
| Chemistry | 1.50 | - | 2.00 | 28.00 | - | 7.00 | 5.1% | N/A | 22.2% |
| Computer Sciences | 2.00 | 1.00 | 1.00 | 21.00 | 1.00 | 7.00 | 8.7% | 50.0% | 12.5% |
| Geology & Geophysics | 4.00 | - | 1.00 | 10.00 | 2.00 | 3.00 | 28.6% | 0.0% | 25.0% |
| Mathematics | 2.75 | - | 0.50 | 37.00 | 8.25 | 5.00 | 6.9% | 0.0% | 9.1% |
| Atmospheric & Oceanic Sciences | - | - | 1.00 | 9.00 | 1.00 | 4.00 | 0.0% | 0.0% | 20.0% |
| Physics | 4.25 | - | - | 34.00 | 6.75 | 4.00 | 11.1% | 0.0% | 0.0% |
| Statistics | 1.00 | - | 2.00 | 10.20 | 1.50 | 1.00 | 8.9% | 0.0% | 66.7% |
| **Biological Sciences** | **60.31** | **42.25** | **69.00** | **382.89** | **99.15** | **114.40** | **13.6%** | **29.9%** | **37.6%** |
| Agronomy | - | 1.00 | - | 14.00 | - | 4.00 | 0.0% | 100.0% | 0.0% |
| Animal Science | - | - | - | 14.60 | 1.00 | 2.00 | 0.0% | 0.0% | 0.0% |
| Bacteriology | 1.00 | 2.00 | 1.00 | 10.00 | 2.00 | 2.00 | 9.1% | 50.0% | 33.3% |
| Biochemistry | 6.00 | - | 2.50 | 22.00 | 1.00 | 2.00 | 21.4% | 0.0% | 55.6% |
| Dairy Science | 1.00 | 1.00 | - | 7.40 | 2.00 | 3.00 | 11.9% | 33.3% | 0.0% |
| Entomology | 1.00 | - | 2.00 | 9.00 | - | 3.00 | 10.0% | N/A | 40.0% |
| Food Microbiology & Toxicology | 1.00 | - | - | 3.00 | - | 1.00 | 25.0% | N/A | 0.0% |
| Food Science | - | 1.00 | 1.00 | 11.00 | 1.00 | 1.00 | 0.0% | 50.0% | 50.0% |
| Genetics | - | 0.50 | 1.00 | 11.00 | 0.50 | 0.50 | 0.0% | 50.0% | 66.7% |
| Horticulture | - | - | 3.00 | 7.50 | 1.00 | 3.00 | 0.0% | 0.0% | 50.0% |
| Nutritional Sciences | 3.00 | - | 2.00 | 3.50 | 2.00 | 0.00 | 46.2% | 0.0% | 100.0% |
| Plant Pathology | 3.00 | 2.00 | 1.00 | 7.00 | 1.00 | 1.00 | 30.0% | 66.7% | 50.0% |
| Forest Ecology & Management | - | 0.50 | - | 10.13 | - | 3.00 | 0.0% | 100.0% | 0.0% |
| Natural Resources - Wildlife Ecology | - | - | - | 3.00 | 1.00 | 1.00 | 0.0% | 0.0% | 0.0% |
| Kinesiology | 1.00 | 2.00 | 6.00 | 2.00 | 3.00 | 1.00 | 33.3% | 40.0% | 85.7% |
| Nelson Institute for Environmental Studies | - | 1.50 | 1.00 | 4.07 | - | - | 0.0% | 100.0% | 100.0% |
| Botany | 3.00 | - | 3.00 | 9.00 | - | 1.50 | 25.0% | N/A | 66.7% |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Communicative Disorders | 3.00 | 1.00 | 4.00 | 5.00 | 1.00 | 0.00 | 37.5% | 50.0% | 100.0% |
| Zoology | 2.00 | 1.00 | 5.00 | 10.00 | 2.00 | 4.00 | 16.7% | 33.3% | 55.6% |
| Anatomy | 3.00 | 2.00 | 1.00 | 8.50 | 3.00 | 3.00 | 26.1% | 40.0% | 25.0% |
| Anesthesiology | - | - | - | 1.00 | 1.00 | 2.00 | 0.0% | 0.0% | 0.0% |
| Biostatistics & Medical Informatics | - | 1.25 | 1.50 | 3.25 | 1.50 | 2.50 | 0.0% | 45.5% | 37.5% |
| Family Medicine | 1.00 | - | 1.00 | 3.10 | 1.65 | 2.00 | 24.4% | 0.0% | 33.3% |
| Genetics | - | 0.50 | 2.00 | 2.99 | 0.50 | 1.50 | 0.0% | 50.0% | 57.1% |
| Obstetrics & Gynecology | - | 1.00 | 1.00 | 6.00 | - | 2.00 | 0.0% | 100.0% | 33.3% |
| Medical History & Bioethics | 1.00 | 1.00 | 0.50 | 2.90 | 1.00 | 2.00 | 25.6% | 50.0% | 20.0% |
| Human Oncology | - | 1.00 | - | 4.05 | 3.00 | 0.20 | 0.0% | 25.0% | 0.0% |
| Medicine | 3.00 | 1.00 | 5.00 | 24.14 | 17.75 | 14.00 | 11.1% | 5.3% | 26.3% |
| Dermatology | - | - | - | 3.00 | - | 2.00 | 0.0% | N/A | 0.0% |
| Medical Microbiology | 1.00 | - | 3.20 | 5.50 | 1.00 | 1.00 | 15.4% | 0.0% | 76.2% |
| Medical Physics | - | 1.00 | - | 6.90 | 1.25 | 5.00 | 0.0% | 44.4% | 0.0% |
| Neurology | 1.00 | - | - | 7.50 | 1.00 | - | 11.8% | 0.0% | N/A |
| Neurological Surgery | - | 1.00 | - | 1.00 | 1.00 | 2.00 | 0.0% | 50.0% | 0.0% |
| Oncology | 2.00 | - | 0.75 | 10.90 | - | 1.00 | 15.5% | N/A | 42.9% |
| Ophthalmology & Visual Sciences | 2.60 | 1.00 | - | 5.00 | 4.00 | 1.00 | 34.2% | 20.0% | 0.0% |
| Orthopedics & Rehabilitation | - | 1.00 | - | 3.50 | 3.00 | 5.00 | 0.0% | 25.0% | 0.0% |
| Pathology & Laboratory Medicine | 2.00 | 3.00 | - | 7.51 | 2.00 | 5.00 | 21.0% | 60.0% | 0.0% |
| Pediatrics | 1.00 | 2.00 | 5.75 | 9.20 | 1.00 | 3.00 | 9.8% | 66.7% | 65.7% |
| Pharmacology | 1.00 | - | 1.00 | 6.00 | 1.00 | 3.00 | 14.3% | 0.0% | 25.0% |
| 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 | 14.00 | 2.00 | 1.00 | 12.5% | 50.0% | 66.7% |
| Population Health Sciences | 4.20 | 2.00 | 3.00 | 7.60 | 2.00 | 2.00 | 35.6% | 50.0% | 60.0% |
| Psychiatry | 3.51 | 1.00 | 3.00 | 5.70 | - | 4.00 | 38.1% | 100.0% | 42.9% |
| Radiology | 0.50 | - | 1.00 | 8.45 | 3.00 | 2.20 | 5.6% | 0.0% | 31.3% |
| Surgery | - | - | - | 16.00 | 7.00 | 4.00 | 0.0% | 0.0% | 0.0% |
| School of Pharmacy | 1.50 | 2.00 | 2.00 | 14.00 | 8.00 | 3.00 | 9.7% | 20.0% | 40.0% |
| Animal Health & Biomedical Sciences | - | - | 1.00 | 5.00 | - | 1.00 | 0.0% | N/A | 50.0% |
| Medical Sciences | 1.00 | 2.00 | - | 3.00 | 6.00 | 1.00 | 25.0% | 25.0% | 0.0% |
| Pathobiological Sciences | - | 1.00 | - | 9.00 | 2.00 | 2.00 | 0.0% | 33.3% | 0.0% |
| Comparative Biosciences | 3.00 | - | 1.00 | 7.00 | 1.00 | 2.00 | 30.0% | 0.0% | 33.3% |
| Surgical Sciences | - | 1.00 | - | 3.00 | 3.00 | 1.00 | 0.0% | 25.0% | 0.0% |
| **Social Studies** | **108.20** | **29.00** | **78.50** | **237.98** | **53.50** | **90.00** | **31.3%** | **35.2%** | **46.6%** |
| Agricultural & Applied Economics | - | - | 1.00 | 15.90 | 3.00 | 3.00 | 0.0% | 0.0% | 25.0% |
| Life Sciences Communication | 1.80 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 47.4% | 50.0% | 66.7% |
| Rural Sociology | 2.00 | - | 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 | - | 1.00 | 33.3% | 100.0% | 66.7% |
| Urban & Regional Planning | - | - | - | 2.00 | - | 1.00 | 0.0% | N/A | 0.0% |
| School of Business | 2.00 | 3.75 | 9.00 | 33.75 | 17.00 | 14.00 | 5.6% | 18.1% | 39.1% |
| Counseling Psychology | 1.00 | 1.00 | 2.00 | 3.00 | 1.00 | - | 25.0% | 50.0% | 100.0% |
| Curriculum & Instruction | 6.75 | 1.25 | 6.00 | 11.15 | - | 4.00 | 37.7% | 100.0% | 60.0% |
| Educational Administration | 1.75 | 2.00 | - | 7.00 | 1.00 | 3.00 | 20.0% | 66.7% | 0.0% |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Educational Policy Studies | 2.00 | 1.00 | 2.00 | 6.00 | - | 1.00 | 25.0% | 100.0% | 66.7% |
| | Educational Psychology | 3.00 | - | 2.00 | 7.00 | 2.00 | 2.00 | 30.0% | 0.0% | 50.0% |
| | Rehabilitation Psychology & Special Education | 3.00 | - | 2.00 | 2.00 | 1.00 | 2.00 | 60.0% | 0.0% | 50.0% |
| | School of Human Ecology | 13.20 | 5.00 | 5.00 | 7.00 | 2.00 | 4.00 | 65.3% | 71.4% | 55.6% |
| | Law School | 10.50 | - | 2.00 | 21.25 | 2.00 | 5.00 | 33.1% | 0.0% | 28.6% |
| | Anthropology | 5.50 | 1.00 | 1.00 | 7.00 | - | 7.00 | 44.0% | N/A | 12.5% |
| | Afro-American Studies | 4.00 | - | 1.00 | 3.25 | 1.00 | 1.00 | 55.2% | 0.0% | 50.0% |
| | Communication Arts | 5.00 | 1.00 | 4.00 | 6.00 | 2.00 | 4.00 | 45.5% | 33.3% | 50.0% |
| | Economics | 1.20 | - | 3.00 | 16.75 | 2.00 | 5.00 | 6.7% | 0.0% | 37.5% |
| | Ethnic Studies | 1.00 | - | - | - | - | - | 100.0% | N/A | N/A |
| | Geography | - | 1.00 | 3.00 | 8.00 | 4.00 | 2.00 | N/A | 20.0% | 60.0% |
| | LaFollette School of Public Affairs | 1.50 | 1.00 | - | 4.50 | - | 2.00 | 25.0% | 100.0% | 0.0% |
| | School of Journalism & Mass Communication | 3.00 | - | 2.00 | 9.00 | - | 0.50 | 25.0% | #DIV/0! | 80.0% |
| | School of Library & Information Studies | 2.00 | - | 5.00 | 1.00 | - | 0.50 | 66.7% | #DIV/0! | 90.9% |
| | Political Science | 4.00 | - | 3.00 | 16.25 | 2.00 | 10.00 | 19.8% | 0.0% | 23.1% |
| | Psychology | 11.00 | 2.00 | - | 14.00 | 2.00 | 7.00 | 44.0% | 50.0% | 0.0% |
| | Social Work | 2.50 | 2.00 | 5.00 | 4.00 | - | 2.00 | 38.5% | 100.0% | 71.4% |
| | Sociology | 8.00 | - | 7.50 | 14.92 | 7.50 | 6.00 | 34.9% | 0.0% | 55.6% |
| | Urban & Regional Planning | - | - | 1.00 | 3.75 | 1.00 | - | 0.0% | 0.0% | 100.0% |
| | School of Nursing | 10.50 | 4.00 | 7.00 | - | - | - | 100.0% | 100.0% | 100.0% |
| | Professional Development & Applied Studies | 1.00 | 1.00 | - | 3.51 | - | - | 22.2% | 100.0% | N/A |
| **Humanities** | | **86.50** | **30.75** | **37.50** | **149.73** | **36.00** | **42.00** | **36.6%** | **46.1%** | **47.2%** |
| | Art | 5.00 | 4.00 | 2.00 | 12.00 | 4.00 | 2.00 | 29.4% | 50.0% | 50.0% |
| | Dance | 2.00 | - | - | 1.00 | 2.00 | - | 66.7% | 0.0% | N/A |
| | African Languages & Literature | 3.00 | - | 1.00 | 2.50 | - | 1.00 | 54.5% | N/A | 50.0% |
| | Art History | 4.00 | - | 4.00 | 2.75 | 2.00 | - | 59.3% | 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 | - | - | 2.25 | - | 2.00 | 30.8% | #DIV/0! | 0.0% |
| | East Asian Languages & Literature | 1.00 | 1.00 | 3.00 | 3.00 | 2.00 | 1.00 | 25.0% | 33.3% | 75.0% |
| | English | 16.70 | 3.00 | 7.00 | 17.30 | 2.00 | 5.00 | 49.1% | 60.0% | 58.3% |
| | French & Italian | 4.00 | 4.00 | - | 11.25 | 2.00 | 1.00 | 26.2% | 66.7% | 0.0% |
| | German | 4.00 | 1.00 | 1.00 | 7.35 | 2.00 | 1.00 | 35.2% | 33.3% | 50.0% |
| | Hebrew & Semitic Studies | 1.00 | 1.00 | 1.00 | 2.00 | - | 1.00 | 33.3% | 100.0% | 50.0% |
| | History | 10.50 | 3.00 | 2.00 | 20.00 | 5.50 | 7.00 | 34.4% | 35.3% | 22.2% |
| | History of Science | - | 1.00 | 1.00 | 2.50 | 2.00 | 1.00 | 0.0% | 33.3% | 50.0% |
| | Linguistics | 3.00 | - | 1.00 | 2.00 | 1.00 | 1.00 | 60.0% | 0.0% | 50.0% |
| | School of Music | 8.00 | 3.00 | 3.00 | 24.50 | 4.00 | 4.00 | 24.6% | 42.9% | 42.9% |
| | Philosophy | 2.00 | 1.00 | 1.00 | 14.00 | - | 2.00 | 12.5% | N/A | 33.3% |
| | Scandinavian Studies | 2.00 | - | 1.00 | 2.00 | - | - | 50.0% | N/A | 100.0% |
| | Slavic Languages | 2.00 | 1.00 | - | 5.00 | 1.00 | 1.00 | 28.6% | 50.0% | 0.0% |
| | Languages & Cultures of Asia | 3.50 | - | 1.00 | 4.33 | 2.00 | 2.00 | 44.7% | 0.0% | 33.3% |
| | Spanish & Portuguese | 4.00 | 2.00 | 3.00 | 7.00 | 2.00 | 5.00 | 36.4% | 50.0% | 37.5% |
| | Theatre & Drama | 3.00 | 2.75 | 1.00 | 3.00 | 2.00 | 3.00 | 50.0% | 57.9% | 25.0% |
| | Women's Studies Program | 1.00 | - | 2.50 | - | - | - | N/A | N/A | 100.0% |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| School of Library & Information Studies | - | - | - | - | - | 1.00 | | | |
| Liberal Studies & the Arts | 2.80 | 2.00 | - | 2.00 | - | - | 58.3% | 100.0% | N/A |

SOURCE: October 2004 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 : Margaret Harrigan, Office of Academic Planning and Analysis

February, 2005

# 2000 - 2004

| Division/Department | Women | | | Men | | |
|---|---|---|---|---|---|---|
| | Reviewed | Achieved | % | Reviewed | Achieved | % |
| Physical Sciences | 8 | 8 | 100.0% | 49 | 46 | 93.9% |
| Biological Sciences | 26 | 22 | 84.6% | 46 | 41 | 89.1% |
| Social Studies | 26 | 23 | 88.5% | 35 | 32 | 91.4% |
| Humanities | 25 | 24 | 96.0% | 25 | 25 | 100.0% |

SOURCE: Office of the Secretary of the Faculty.

**Table 3b. Tenure Promotion Outcomes by Gender, 2004**

## Physical Sciences

| Entering Cohort | Women Total Hired | Women % Still Probation | Women % Left w/o Tenure | Women % Tenured | Men Total Hired | Men % Still Probation | Men % Left w/o Tenure | Men % Tenured |
|---|---|---|---|---|---|---|---|---|
| 1987-91 | **17** | **0.0%** | **11.8%** | **88.2%** | **87** | **0.0%** | **24.1%** | **75.9%** |
| 1991-95 | **7** | **0.0%** | **57.1%** | **42.9%** | **35** | **0.0%** | **20.0%** | **80.0%** |
| 1995-99 | **10** | **0.0%** | **40.0%** | **60.0%** | **34** | **0.0%** | **11.8%** | **88.2%** |
| 1999-03 | **15** | 66.7% | 6.7% | 26.7% | **76** | 65.8% | 7.9% | 26.3% |
| 2003-07 | 12 | 100.0% | 0.0% | 0.0% | 23 | 95.7% | 0.0% | 4.3% |

## Biological Sciences

| Entering Cohort | Women Total Hired | Women % Still Probation | Women % Left w/o Tenure | Women % Tenured | Men Total Hired | Men % Still Probation | Men % Left w/o Tenure | Men % Tenured |
|---|---|---|---|---|---|---|---|---|
| 1987-91 | **29** | **0.0%** | **44.8%** | **55.2%** | **101** | **0.0%** | **30.7%** | **69.3%** |
| 1991-95 | **26** | **0.0%** | **26.9%** | **73.1%** | **82** | **0.0%** | **24.4%** | **75.6%** |
| 1995-99 | **23** | 21.7% | 8.7% | 69.6% | **49** | 6.1% | 24.5% | 69.4% |
| 1999-03 | **46** | 80.4% | 13.0% | 6.5% | **86** | 83.7% | 8.1% | 8.1% |
| 2003-07 | 18 | 100.0% | 0.0% | 0.0% | 30 | 100.0% | 0.0% | 0.0% |

## Social Studies

| Entering Cohort | Women Total Hired | Women % Still Probation | Women % Left w/o Tenure | Women % Tenured | Men Total Hired | Men % Still Probation | Men % Left w/o Tenure | Men % Tenured |
|---|---|---|---|---|---|---|---|---|
| 1987-91 | **72** | **0.0%** | **51.4%** | **48.6%** | **82** | **0.0%** | **54.2%** | **45.8%** |
| 1991-95 | **48** | 4.2% | 41.7% | 54.2% | **50** | **0.0%** | **42.0%** | **58.0%** |
| 1995-99 | **41** | 9.8% | 48.8% | 41.5% | **54** | 3.7% | 48.1% | 48.1% |
| 1999-03 | **52** | 69.2% | 23.1% | 7.7% | **78** | 62.8% | 15.4% | 21.8% |
| 2003-07 | 27 | 100.0% | 0.0% | 0.0% | 23 | 87.0% | 4.3% | 8.7% |

## Humanities

| Entering Cohort | Women Total Hired | Women % Still Probation | Women % Left w/o Tenure | Women % Tenured | Men Total Hired | Men % Still Probation | Men % Left w/o Tenure | Men % Tenured |
|---|---|---|---|---|---|---|---|---|
| 1987-91 | **44** | **0.0%** | **36.4%** | **63.6%** | **50** | **0.0%** | **36.0%** | **64.0%** |
| 1991-95 | **27** | **0.0%** | **22.2%** | **77.8%** | **25** | **0.0%** | **24.0%** | **76.0%** |
| 1995-99 | **23** | 4.3% | 17.4% | 78.3% | **21** | **0.0%** | **14.3%** | **85.7%** |
| 1999-03 | **47** | 61.7% | 6.4% | 31.9% | **43** | 67.4% | 9.3% | 23.3% |
| 2003-07 | 9 | 100.0% | 0.0% | 0.0% | 16 | 100.0% | 0.0% | 0.0% |

SOURCE: UW Madison Tenure file and IADS appointment information system, Dec 2004

NOTE: Numbers in **BOLDFACE** are final; numbers in normal typeface are in flux and will change year-to-year as new faculty are hired, are tenured, and/or leave the UW without tenure.

NOTE: Probationary faculty only. Adjustments made for time on tenure clock outside UW; no adjustments for tenure clock extensions.

NOTE: 1987-91 cohort hired between June 1987 and May 1991; 1991-95 cohort hired between June 1991 and May 1995; 1995-99 cohort hired between June 1995 and May 1999; 1999-03 cohort hired between June 1999 and May 2003; 2003-07 cohort hired after May 15 2003.

**Table 4. Median Years in Rank by Gender, 2004**

| | Women | | | Men | | | Women's Median Time in Rank as % of Men's | | |
|---|---|---|---|---|---|---|---|---|---|
| Division | Full | Associate | Assistant | Full | Associate | Assistant | Full | Associate | Assistant |
| Total | 6.1 | 2.1 | 3.0 | 12.1 | 3.1 | 3.1 | 50.4% | 67.7% | 96.8% |
| Physical Sciences | 3.2 | 0.6 | 1.8 | 12.1 | 2.2 | 2.8 | 26.0% | 27.3% | 64.3% |
| Biological Sciences | 7.3 | 3.3 | 2.6 | 11.3 | 5.1 | 2.9 | 64.6% | 64.7% | 89.7% |
| Social Studies | 6.1 | 2.1 | 3.1 | 12.1 | 2.1 | 3.1 | 50.4% | 100.0% | 100.0% |
| Humanities | 6.1 | 2.1 | 3.3 | 12.1 | 3.1 | 3.1 | 50.4% | 67.7% | 106.5% |

SOURCE: UW Madison IADS (Integrated Appointment Data System), October 2004
NOTES:
Years in rank computed only for those currently holding that rank.
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 : Margaret Harrigan, Office of Academic Planning and Analysis
May 2005

**Table 5a. Time at Institution (Median Numer of Years) by Gender and Rank, 2004**

| | 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 | 4.0 | 14.5 | 6.0 | 1.0 | 15.0 | 19.0 | 6.0 | 2.0 | 26.7% | 76.3% | 100.0% | 50.0% |
| Biological Sciences | 7.0 | 17.0 | 9.0 | 2.0 | 14.0 | 19.0 | 10.0 | 2.0 | 50.0% | 89.5% | 90.0% | 100.0% |
| Social Studies | 8.0 | 15.0 | 7.0 | 3.0 | 12.0 | 19.0 | 5.0 | 3.0 | 66.7% | 78.9% | 140.0% | 100.0% |
| Humanities | 12.0 | 16.0 | 6.0 | 3.0 | 14.0 | 19.0 | 7.0 | 3.0 | 85.7% | 84.2% | 85.7% | 100.0% |

SOURCE: October 2004 IADS Frozen slice
Prepared by : Margaret Harrigan, Office of Academic Planning and Analysis
February, 2005

**Table 5b. Attrition by Gender, 2003-2004**

| | FTEs | | | % | | |
|---|---|---|---|---|---|---|
| | Retired | Resigned | 2003 Total FTE | Retired | Resigned | Left UW |
| Total | 62 | 41 | 2210.61 | 2.8% | 1.9% | 4.7% |
| Women | 7 | 15 | 580.46 | 1.2% | 2.6% | 3.8% |
| Men | 55 | 26 | 1630.15 | 3.4% | 1.6% | 5.0% |
| Physical Sciences | | | | | | |
| Women | 0 | 2 | 47.50 | 0.0% | 4.2% | 4.2% |
| Men | 13 | 5 | 410.05 | 3.2% | 1.2% | 4.4% |
| Biological Sciences | | | | | | |
| Women | 0 | 4 | 165.51 | 0.0% | 2.4% | 2.4% |
| Men | 15 | 10 | 598.19 | 2.5% | 1.7% | 4.2% |
| Social Studies | | | | | | |
| Women | 6 | 6 | 211.70 | 2.8% | 2.8% | 5.7% |
| Men | 12 | 11 | 388.38 | 3.1% | 2.8% | 5.9% |
| Humanities | | | | | | |
| Women | 1 | 3 | 155.75 | 0.6% | 1.9% | 2.6% |
| Men | 15 | 0 | 233.53 | 6.4% | 0.0% | 6.4% |

SOURCE: IADS appointment system, Feb. 2005
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 : KyungAe Jun & Margaret Harrigan, Office of Academic Planning and Analysis
February, 2005

**Table 6. Number of Women in Science & Engineering Who are in Non-Tenure-Track Positions, 2004**

| | Women | | Men | | |
|---|---|---|---|---|---|
| | Mean FTE | Total FTE | Mean FTE | Total FTE | % Female |
| Physical Sciences | | | | | |
| Teaching | 0.7 | 29.7 | 0.8 | 53.0 | 35.9% |
| Research | 0.7 | 28.1 | 0.9 | 267.3 | 9.5% |
| Clinical | 0.1 | 0.1 | N/A | N/A | N/A |
| Biological Sciences | | | | | |
| Teaching | 0.6 | 43.8 | 0.7 | 35.0 | 55.6% |
| Research | 0.8 | 240.0 | 0.9 | 343.7 | 41.1% |
| Clinical | 0.8 | 281.6 | 0.9 | 534.3 | 34.5% |
| Social Studies | | | | | |
| Teaching | 0.5 | 88.8 | 0.5 | 62.0 | 58.9% |
| Research | 0.8 | 73.8 | 0.8 | 48.7 | 60.3% |
| Clinical | 0.7 | 42.9 | 1.0 | 14.5 | 74.8% |
| Humanities | | | | | |
| Teaching | 0.6 | 57.1 | 0.6 | 38.3 | 59.9% |
| Research | 0.9 | 3.5 | 1.0 | 8.0 | 30.4% |
| Clinical | 0.5 | 1.4 | 0.5 | 2.0 | 41.8% |
| Administrative Units | | | | | |
| Teaching | 0.8 | 3.8 | 0.6 | 3.0 | 55.7% |
| Research | 0.8 | 4.1 | 0.9 | 5.5 | 42.8% |
| Clinical | 0.5 | 2.8 | 0.5 | 2.1 | 57.9% |

SOURCE: October Payroll 2004
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: Margaret Harrigan and Kyung Ae Jun, Office of Academic Planning and Analysis
March, 2005

**Table 7a. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2004**

| | Total Faculty (Full Profs.) | | | Department Chairs | | | | |
|---|---|---|---|---|---|---|---|---|
| Division | Women | Men | % Women | Women | Men | % Women | % Women Chairs | % Men Chairs |
| Physical Sciences | 30 | 291 | **9.3%** | 1 | 18 | **5.3%** | *3.3%* | *6.2%* |
| Biological Sciences | 63 | 404 | **13.5%** | 2 | 45 | **4.3%** | *3.2%* | *11.1%* |
| Social Studies | 79 | 186 | **29.8%** | 7 | 18 | **28.0%** | *8.9%* | *9.7%* |
| Humanities | 89 | 155 | **36.5%** | 5 | 17 | **22.7%** | *5.6%* | *11.0%* |
| Total | 248 | 983 | **20.1%** | 15 | 98 | **13.3%** | *6.0%* | *10.0%* |

SOURCE: IADS appointment system frozen slice, October 2004.
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: KyungAe Jun and Margaret Harrigan, Office of Academic Planning and Analysis
March 2005

**Table 7b. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2004**

| | Total Faculty (Full Profs.) | | | Deans (Faculty) | | | | |
|---|---|---|---|---|---|---|---|---|
| Division | Women | Men | % Women | Women | Men | % Women | % Women Deans | % Men Deans |
| Physical Sciences | 28 | 305 | **8.4%** | 1 | 6 | **14.3%** | *3.6%* | *2.0%* |
| Biological Sciences | 58 | 353 | **14.1%** | 2 | 13 | **13.3%** | *3.4%* | *3.7%* |
| Social Studies | 98 | 244 | **28.7%** | 12 | 17 | **41.4%** | *12.2%* | *7.0%* |
| Humanities | 99 | 158 | **38.5%** | 2 | 3 | **40.0%** | *2.0%* | *1.9%* |
| Total | 283 | 1060 | **21.1%** | 17 | 36 | **32.1%** | *6.0%* | *3.4%* |

SOURCE: IADS Frozen Appointment Data view, October 2004.
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: KyungAe Jun and Margaret Harrigan, Office of Academic Planning and Analysis
March 2005

**Table 7c. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2004**

| | Total Faculty (Full Profs.) | | | Central Administration | | | | |
|---|---|---|---|---|---|---|---|---|
| Division | Women | Men | % Women | Women | Men | % Women | % Women Admin. | % Men Admin. |
| Physical Sciences | 28 | 305 | **8.4%** | 1 | 1 | **50.0%** | *3.6%* | *0.3%* |
| Biological Sciences | 58 | 353 | **14.1%** | 0 | 3 | **0.0%** | *0.0%* | *0.8%* |
| Social Studies | 98 | 244 | **28.7%** | 1 | 1 | **50.0%** | *1.0%* | *0.4%* |
| Humanities | 99 | 158 | **38.5%** | 1 | 1 | **N/A** | *1.0%* | *0.6%* |
| Total | 283 | 1060 | **21.1%** | 3 | 6 | **33.3%** | *1.1%* | *0.6%* |

SOURCE: IADS Frozen Appointment Data view, October 2004.
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: KyungAe Jun and Margaret Harrigan, Office of Academic Planning and Analysis
March 2005

**Table 7d. Number and Percent of Women Scientists and Engineers in Administrative Positions, 2004**

| | Total Faculty (Full Profs.) | | | Large Center & Institute Directors | | | | |
|---|---|---|---|---|---|---|---|---|
| Division | Women | Men | % Women | Women | Men | % Women | % Women Directors | % Men Directors |
| Physical Sciences | 28 | 305 | **8.4%** | 0 | 18 | **0.0%** | *0.0%* | *5.9%* |
| Biological Sciences | 58 | 353 | **14.1%** | 2 | 15 | **11.8%** | *3.4%* | *4.2%* |
| Social Studies | 98 | 244 | **28.7%** | 8 | 10 | **44.4%** | *8.2%* | *4.1%* |
| Humanities | 99 | 158 | **38.5%** | 7 | 12 | **36.8%** | *7.1%* | *7.6%* |
| Total | 283 | 1060 | **21.1%** | 12 | 61 | **16.4%** | *4.2%* | *5.8%* |

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, 2004**

| | Women | Men | % Female |
|---|---|---|---|
| **Named Professorships** | | | |
| Vilas Professors | 4 | 11 | 26.7% |
| Hilldale Professors | 1 | 12 | 7.7% |
| John Bascom Professors | 1 | 4 | 20.0% |
| Evju-Bascom Professors | 3 | 6 | 33.3% |
| Named-Bascom Professors | 19 | 43 | 30.6% |
| Steenbock Professors | 1 | 9 | 10.0% |
| Wisconsin Distinguished Professors | 0 | 9 | 0.0% |
| Other named professorships (incl. WARF) | 31 | 192 | 13.9% |
| Holds two named professorships | 7 | 35 | 16.7% |
| New named professorships | 14 | 46 | 23.3% |
| Number holding named professorships | 53 | 251 | 17.4% |
| **Full Professors at UW-Madison** | **263** | **1060** | **19.9%** |
| **Major Awards** | | | |
| Vilas Associate Award | N/A | N/A | N/A |
| Hilldale Award | 2 | 2 | 50.0% |
| H. I. Romnes Faculty Fellowship | 1 | 6 | 14.3% |
| WARF Kellett Mid-Career Award | 2 | 3 | 40.0% |
| **Tenured Professors at UW-Madison** | **373** | **1313** | **22.1%** |

SOURCE: Office of the Provost. Totals from IADS appointment system frozen slice October 2004.
NOTE: Counts of Full Professors are headcounts of active "Professor" appointments in October 2004; counts of Tenured Professors are headcounts of active "Professor" and "Associate Professor" appointments in October 2004.
Prepared by: Jennifer Sheridan, WISELI
January, 2004

**Table 9. Number and Percent of Women Science & Engineering Faculty on Promotion and Tenure Committees, 2004**

| | Women | Men | % Female |
|---|---|---|---|
| Faculty Senate | | | |
| Physical Sciences | 1 | 44 | 2.2% |
| Biological Sciences | 10 | 64 | 13.5% |
| Social Studies | 19 | 40 | 32.2% |
| Arts & Humanities | 17 | 23 | 42.5% |
| **Senators (total)** | **47** | **171** | **21.6%** |
| Physical Sciences | 2 | 31 | 6.1% |
| Biological Sciences | 23 | 43 | 34.8% |
| Social Studies | 12 | 31 | 27.9% |
| Arts & Humanities | 14 | 18 | 43.8% |
| **Alternates (Total)** | **51** | **123** | **29.3%** |
| Athletic Board | 7 | 16 | 30.4% |
| Campus Planning Committee | 4 | 9 | 30.8% |
| Divisional Executive Committees* | | | |
| Physical Sciences | 1 | 11 | 8.3% |
| Bio. Sciences, Curriculum Planning | 2 | 7 | 22.2% |
| Bio. Sciences, Strategic Planning | 1 | 8 | 11.1% |
| Bio. Sciences, Tenure | 5 | 7 | 41.7% |
| Social Studies | 3 | 9 | 25.0% |
| Arts & Humanities | 4 | 8 | 33.3% |
| Faculty Compensation and Economic Benefits Commission* | 3 | 6 | 33.3% |
| Faculty Rights and Responsibilities Committee* | 2 | 7 | 22.2% |
| Library Committee* | 6 | 5 | 54.5% |
| University Committee* | 2 | 4 | 33.3% |
| University Academic Planning Council | 5 | 9 | 35.7% |
| Graduate School Academic Planning Council | 2 | 6 | 25.0% |
| Graduate School Executive Committee | | | |
| Physical Sciences | 0 | 5 | 0.0% |
| Biological Sciences | 0 | 4 | 0.0% |
| Social Studies | 3 | 3 | 50.0% |
| Arts & Humanities | 4 | 1 | 80.0% |
| Graduate School Research Committee | | | |
| Physical Sciences | 3 | 8 | 27.3% |
| Biological Sciences | 2 | 10 | 16.7% |
| Social Studies | 3 | 6 | 33.3% |
| Arts & Humanities | 4 | 7 | 36.4% |
| **All Faculty** | **603** | **1635** | **26.9%** |
| **Physical Sciences** | **59** | **451** | **11.6%** |
| **Biological Sciences** | **154** | **554** | **21.8%** |
| **Social Studies** | **210** | **385** | **35.3%** |
| **Arts & Humanities** | **180** | **245** | **42.4%** |

SOURCE: 2004-2005 Faculty Senate and UW-Madison Committees, Office of the Secretary of the faculty, November 2004. Totals from IADS appointment system frozen slice October 2004.
NOTE: Counts of All Faculty by Division are headcounts of active faculty appointments in October 2004. Unassigned faculty have been temporarily assigned a division according to their departmental affiliation and/or research interests.
Prepared by: Jennifer Sheridan, WISELI
January, 2005
* Members chosen by election of faculty.

**Table 10a. Salary of Science & Engineering Faculty by Gender (Controlling for Department), 2004**

| Division/Department | Women, Median | Men, Median | Women's Median as % of Men's |
|---|---|---|---|
| **Physical Sciences** | **81,000** | **92,287** | **87.8%** |
| Biological Systems Engineering | 56,364 | 81,704 | 69.0% |
| Soil Science | 59,727 | 74,969 | 79.7% |
| Chemical & Biological Engineering | 100,143 | 95,111 | 105.3% |
| Civil & Environmental Engineering | 81,476 | 84,306 | 96.6% |
| Electrical & Computer Engineering | 81,000 | 96,626 | 83.8% |
| Biomedical Engineering | 72,881 | 90,139 | 80.9% |
| Industrial Engineering | 97,443 | 119,765 | 81.4% |
| Mechanical Engineering | 85,705 | 98,960 | 86.6% |
| Materials Science & Engineering | 78,000 | 110,329 | 70.7% |
| Engineering Physics | 87,789 | 103,042 | 85.2% |
| Engineering Professional Development | N/A | 88,814 | N/A |
| Astronomy | 90,393 | 94,343 | 95.8% |
| Chemistry | 60,884 | 99,006 | 61.5% |
| Computer Sciences | 93,369 | 113,140 | 82.5% |
| Geology & Geophysics | 72,891 | 74,446 | 97.9% |
| Mathematics | 86,957 | 85,523 | 101.7% |
| Atmospheric & Oceanic Sciences | 58,500 | 83,453 | 70.1% |
| Physics | 111,271 | 88,925 | 125.1% |
| Statistics | 63,173 | 93,177 | 67.8% |
| **Biological Sciences** | **72,639** | **84,143** | **86.3%** |
| Agronomy | 63,789 | 71,187 | 89.6% |
| Animal Science | N/A | 84,770 | N/A |
| Bacteriology | 74,821 | 85,212 | 87.8% |
| Biochemistry | 89,608 | 103,129 | 86.9% |
| Dairy Science | 77,037 | 77,931 | 98.9% |
| Entomology | 58,507 | 81,794 | 71.5% |
| Food Microbiology & Toxicology | 74,668 | 79,313 | 94.1% |
| Food Science | 61,570 | 81,726 | 75.3% |
| Genetics | 65,454 | 98,680 | 66.3% |
| Horticulture | 60,933 | 73,503 | 82.9% |
| Nutritional Sciences | 79,351 | 92,623 | 85.7% |
| Plant Pathology | 71,068 | 90,246 | 78.7% |
| Forest Ecology & Management | 66,791 | 84,593 | 79.0% |
| Natural Resources - Wildlife Ecology | N/A | 80,599 | N/A |
| Kinesiology | 56,600 | 64,892 | 87.2% |
| Nelson Institute for Environmental Studies | 67,862 | 88,428 | 76.7% |
| Botany | 64,258 | 87,169 | 73.7% |
| Communicative Disorders | 71,074 | 90,455 | 78.6% |
| Zoology | 63,601 | 72,932 | 87.2% |
| Anatomy | 84,664 | 94,055 | 90.0% |
| Anesthesiology | N/A | 77,363 | N/A |
| Biostatistics & Medical Informatics | 67,360 | 86,284 | 78.1% |

| | | | |
|---|---|---|---|
| Family Medicine | 86,857 | 92,797 | 93.6% |
| Genetics | 63,946 | 81,240 | 78.7% |
| Obstetrics & Gynecology | 48,557 | 86,959 | 55.8% |
| Medical History & Bioethics | 76,196 | 97,410 | 78.2% |
| Human Oncology | 68,132 | 84,884 | 80.3% |
| Medicine | 70,412 | 81,056 | 86.9% |
| Dermatology | N/A | 107,675 | N/A |
| Medical Microbiology | 64,627 | 95,291 | 67.8% |
| Medical Physics | 78,172 | 77,588 | 100.8% |
| Neurology | 99,948 | 95,477 | 104.7% |
| Neurological Surgery | 64,082 | 53,157 | 120.6% |
| Oncology | 103,496 | 107,513 | 96.3% |
| Ophthalmology & Visual Sciences | 90,084 | 102,219 | 88.1% |
| Orthopedics & Rehabilitation | 69,539 | 61,675 | 112.8% |
| Pathology & Laboratory Medicine | 91,599 | 84,873 | 107.9% |
| Pediatrics | 81,818 | 94,393 | 86.7% |
| Pharmacology | 84,699 | 92,446 | 91.6% |
| Biomolecular Chemistry | 76,196 | 95,140 | 80.1% |
| Physiology | 85,148 | 94,995 | 89.6% |
| Population Health Sciences | 86,728 | 106,677 | 81.3% |
| Psychiatry | 68,240 | 80,191 | 85.1% |
| Radiology | 39,217 | 73,332 | 53.5% |
| Surgery | N/A | 70,400 | N/A |
| School of Pharmacy | 70,490 | 77,623 | 90.8% |
| Animal Health & Biomedical Sciences | 63,982 | 82,560 | 77.5% |
| Medical Sciences | 73,827 | 73,423 | 100.5% |
| Pathobiological Sciences | 67,322 | 90,906 | 74.1% |
| Comparative Biosciences | 85,510 | 78,039 | 109.6% |
| Surgical Sciences | 74,268 | 69,166 | 107.4% |
| **Social Studies** | **85,275** | **91,852** | **92.8%** |
| Agricultural & Applied Economics | 65,856 | 90,192 | 73.0% |
| Life Sciences Communication | 67,476 | 73,907 | 91.3% |
| Rural Sociology | 82,729 | 72,503 | 114.1% |
| Natural Resources-Landscape Architecture | 60,059 | 73,010 | 82.3% |
| Urban & Regional Planning | N/A | 71,111 | N/A |
| School of Business | 126,539 | 141,571 | 89.4% |
| Counseling Psychology | 62,253 | 85,840 | 72.5% |
| Curriculum & Instruction | 61,436 | 85,253 | 72.1% |
| Educational Administration | 65,629 | 87,068 | 75.4% |
| Educational Policy Studies | 66,831 | 84,563 | 79.0% |
| Educational Psychology | 85,848 | 85,317 | 100.6% |
| Rehabilitation Psychology & Special Education | 71,040 | 63,539 | 111.8% |
| School of Human Ecology | 69,919 | 65,282 | 107.1% |
| Law School | 122,589 | 117,917 | 104.0% |
| Anthropology | 64,606 | 60,718 | 106.4% |
| Afro-American Studies | 85,091 | 93,172 | 91.3% |
| Communication Arts | 66,048 | 64,957 | 101.7% |
| Economics | 73,674 | 162,606 | 45.3% |
| Ethnic Studies | 91,071 | N/A | N/A |
| Geography | 53,954 | 70,390 | 76.6% |

| | | | |
|---|---|---|---|
| LaFollette School of Public Affairs | 88,546 | 94,508 | 93.7% |
| School of Journalism & Mass Communication | 70,873 | 72,963 | 97.1% |
| School of Library & Information Studies | 58,000 | 71,528 | 81.1% |
| Political Science | 78,948 | 80,971 | 97.5% |
| Psychology | 92,680 | 85,819 | 108.0% |
| Social Work | 66,996 | 85,144 | 78.7% |
| Sociology | 66,478 | 86,000 | 77.3% |
| Urban & Regional Planning | 56,815 | 71,393 | 79.6% |
| School of Nursing | 78,552 | N/A | N/A |
| Professional Development & Applied Studies | 58,835 | 73,172 | 80.4% |
| **Humanities** | **66,932** | **71,868** | **93.1%** |
| Art | 62,573 | 66,400 | 94.2% |
| Dance | 62,466 | 60,940 | 102.5% |
| African Languages & Literature | 78,043 | 76,859 | 101.5% |
| Art History | 68,762 | 75,889 | 90.6% |
| Classics | 65,411 | 85,749 | 76.3% |
| Comparative Literature | 83,753 | 72,856 | 115.0% |
| East Asian Languages & Literature | 50,652 | 67,994 | 74.5% |
| English | 76,557 | 84,390 | 90.7% |
| French & Italian | 56,959 | 82,685 | 68.9% |
| German | 64,295 | 69,244 | 92.9% |
| Hebrew & Semitic Studies | 60,783 | 95,440 | 63.7% |
| History | 77,954 | 78,321 | 99.5% |
| History of Science | 60,158 | 66,450 | 90.5% |
| Linguistics | 67,805 | 58,238 | 116.4% |
| School of Music | 68,194 | 72,385 | 94.2% |
| Philosophy | 62,371 | 77,330 | 80.7% |
| Scandinavian Studies | 76,276 | 66,571 | 114.6% |
| Slavic Languages | 78,050 | 81,000 | 96.4% |
| Languages & Cultures of Asia | 73,168 | 71,349 | 102.5% |
| Spanish & Portuguese | 63,158 | 61,802 | 102.2% |
| Theatre & Drama | 64,459 | 65,641 | 98.2% |
| Women's Studies Program | 50,348 | N/A | N/A |
| School of Library & Information Studies | N/A | 66,725 | N/A |
| Liberal Studies & the Arts | 67,811 | 68,178 | 99.5% |

SOURCE: October 2004 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 : Margaret Harrigan, Office of Academic Planning and Analysis

February, 2005

**Table 10b. Salary of Science & Engineering Faculty by Gender (Controlling for Department and Rank), 2004**

| 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** | **100,161** | **86,747** | **71,376** | **103,191** | **79,924** | **71,736** | **97.1%** | **108.5%** | **99.5%** |
| Biological Systems Engineering | N/A | N/A | 56,364 | 81,981 | 72,032 | 58,507 | N/A | N/A | 96.3% |
| Soil Science | N/A | N/A | 59,727 | 82,299 | 66,027 | 57,254 | N/A | N/A | 104.3% |
| Chemical & Biological Engineering | 100,143 | N/A | N/A | 139,565 | 88,552 | 72,684 | 71.8% | N/A | N/A |
| Civil & Environmental Engineering | 92,081 | N/A | 70,871 | 107,635 | 81,048 | 80,000 | 85.5% | N/A | 88.6% |
| Electrical & Computer Engineering | 105,716 | 94,606 | 81,000 | 111,627 | 91,071 | 80,971 | 94.7% | 103.9% | 100.0% |
| Biomedical Engineering | N/A | N/A | 72,881 | 112,429 | 111,271 | 78,951 | N/A | N/A | 92.3% |
| Industrial Engineering | 100,161 | 90,000 | 75,921 | 126,221 | 92,808 | 75,921 | 79.4% | 97.0% | 100.0% |
| Mechanical Engineering | 136,945 | 85,705 | 71,881 | 112,239 | 85,863 | 69,861 | 122.0% | 99.8% | 102.9% |
| Materials Science & Engineering | 102,366 | N/A | 77,466 | 131,101 | 75,897 | 76,931 | 78.1% | N/A | 100.7% |
| Engineering Physics | 92,200 | 87,789 | N/A | 136,420 | 86,728 | 82,991 | 67.6% | 101.2% | N/A |
| Engineering Professional Development | N/A | N/A | N/A | 111,841 | 93,274 | 72,560 | N/A | N/A | N/A |
| Astronomy | 90,393 | 66,568 | N/A | 97,536 | 70,800 | N/A | 92.7% | 94.0% | N/A |
| Chemistry | 90,000 | N/A | 59,313 | 112,018 | N/A | 60,464 | 80.3% | N/A | 98.1% |
| Computer Sciences | 111,726 | 80,239 | 85,567 | 118,341 | 88,344 | 82,991 | 94.4% | 90.8% | 103.1% |
| Geology & Geophysics | 74,905 | N/A | 57,733 | 83,441 | 65,277 | 56,893 | 89.8% | N/A | 101.5% |
| Mathematics | 86,957 | N/A | 75,921 | 93,916 | 75,618 | 65,000 | 92.6% | N/A | 116.8% |
| Atmospheric & Oceanic Sciences | N/A | N/A | 58,500 | 89,630 | 69,967 | 60,266 | N/A | N/A | 97.1% |
| Physics | 111,271 | N/A | N/A | 95,879 | 71,579 | 64,559 | 116.1% | N/A | N/A |
| Statistics | 146,424 | N/A | 60,345 | 95,203 | 80,971 | 66,743 | 153.8% | N/A | 90.4% |
| **Biological Sciences** | **96,937** | **74,268** | **60,485** | **95,477** | **72,817** | **59,691** | **101.5%** | **102.0%** | **101.3%** |
| Agronomy | N/A | 63,789 | N/A | 71,350 | N/A | 58,054 | N/A | N/A | N/A |
| Animal Science | N/A | N/A | N/A | 88,322 | 75,098 | 56,815 | N/A | N/A | N/A |
| Bacteriology | 84,677 | 74,821 | 60,325 | 88,375 | 66,459 | 65,258 | 95.8% | 112.6% | 92.4% |
| Biochemistry | 93,633 | N/A | 62,300 | 109,440 | 63,994 | 65,669 | 85.6% | N/A | 94.9% |
| Dairy Science | N/A | 77,037 | N/A | 80,587 | 63,698 | 57,834 | N/A | 120.9% | N/A |
| Entomology | 76,677 | N/A | 57,642 | 87,878 | N/A | 56,926 | 87.3% | N/A | 101.3% |
| Food Microbiology & Toxicology | 74,668 | N/A | N/A | 84,058 | N/A | 60,593 | 88.8% | N/A | N/A |
| Food Science | N/A | 65,123 | 58,016 | 84,686 | 66,479 | 64,976 | N/A | 98.0% | 89.3% |
| Genetics | N/A | 74,931 | 63,801 | 100,336 | 91,071 | 64,069 | N/A | 82.3% | 99.6% |
| Horticulture | N/A | N/A | 60,933 | 79,473 | 71,752 | 59,482 | N/A | N/A | 102.4% |
| Nutritional Sciences | 80,858 | N/A | 60,122 | 110,000 | 70,499 | N/A | 73.5% | N/A | N/A |
| Plant Pathology | 87,211 | 67,466 | 58,912 | 92,551 | 82,992 | 58,391 | 94.2% | 81.3% | 100.9% |
| Forest Ecology & Management | N/A | 66,791 | N/A | 88,485 | N/A | 56,416 | N/A | N/A | N/A |
| Natural Resources - Wildlife Ecology | N/A | N/A | N/A | 88,234 | 68,667 | 57,273 | N/A | N/A | N/A |
| Kinesiology | 84,082 | 65,547 | 55,650 | 96,299 | 63,611 | 55,850 | 87.3% | 103.0% | 99.6% |
| Nelson Institute for Environmental Studies | N/A | 67,862 | 70,871 | 88,428 | N/A | N/A | N/A | N/A | N/A |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Botany | 92,638 | N/A | 53,588 | 88,724 | N/A | 50,671 | 104.4% | N/A | 105.8% |
| Communicative Disorders | 95,000 | 73,699 | 61,781 | 96,222 | 70,546 | N/A | 98.7% | 104.5% | N/A |
| Zoology | 87,742 | 64,147 | 59,758 | 84,913 | 61,843 | 56,914 | 103.3% | 103.7% | 105.0% |
| Anatomy | 99,335 | 75,166 | 64,177 | 108,632 | 77,929 | 65,539 | 91.4% | 96.5% | 97.9% |
| Anesthesiology | N/A | N/A | N/A | 95,699 | 70,183 | 71,290 | N/A | N/A | N/A |
| Biostatistics & Medical Informatics | N/A | 81,454 | 67,360 | 109,253 | 90,609 | 80,178 | N/A | 89.9% | 84.0% |
| Family Medicine | 115,785 | N/A | 57,928 | 101,170 | 92,797 | 77,273 | 114.4% | N/A | 75.0% |
| Genetics | N/A | 74,931 | 63,946 | 89,997 | 91,071 | 62,148 | N/A | 82.3% | 102.9% |
| Obstetrics & Gynecology | N/A | 62,650 | 34,465 | 93,963 | N/A | 58,370 | N/A | N/A | 59.0% |
| Medical History & Bioethics | 141,131 | 76,196 | 58,685 | 124,126 | N/A | 59,331 | 113.7% | N/A | 98.9% |
| Human Oncology | N/A | 68,132 | N/A | 91,037 | 59,128 | 66,280 | N/A | 115.2% | N/A |
| Medicine | 107,331 | 87,028 | 60,374 | 102,622 | 74,841 | 61,261 | 104.6% | 116.3% | 98.6% |
| Dermatology | N/A | N/A | N/A | 124,876 | N/A | 60,869 | N/A | N/A | N/A |
| Medical Microbiology | 99,375 | N/A | 64,627 | 95,291 | 99,335 | 67,106 | 104.3% | N/A | 96.3% |
| Medical Physics | N/A | 78,172 | N/A | 86,939 | 78,443 | 66,280 | N/A | 99.7% | N/A |
| Neurology | 99,948 | N/A | N/A | 95,477 | 86,245 | N/A | 104.7% | N/A | N/A |
| Neurological Surgery | N/A | 64,082 | N/A | 110,399 | 47,472 | 51,680 | N/A | 135.0% | N/A |
| Oncology | 105,175 | N/A | 68,151 | 107,513 | N/A | 66,280 | 97.8% | N/A | 102.8% |
| Ophthalmology & Visual Sciences | 95,759 | 77,815 | N/A | 116,604 | 81,796 | 65,383 | 82.1% | 95.1% | N/A |
| Orthopedics & Rehabilitation | N/A | 69,539 | N/A | 107,598 | 59,475 | 60,771 | N/A | 116.9% | N/A |
| Pathology & Laboratory Medicine | 95,467 | 81,647 | N/A | 101,976 | 66,080 | 49,753 | 93.6% | 123.6% | N/A |
| Pediatrics | 107,478 | 82,958 | 55,757 | 106,501 | 69,352 | 56,162 | 100.9% | 119.6% | 99.3% |
| Pharmacology | 107,273 | N/A | 62,124 | 110,015 | 78,676 | 64,776 | 97.5% | N/A | 95.9% |
| Biomolecular Chemistry | 91,517 | 76,196 | 62,148 | 101,472 | 75,164 | 66,326 | 90.2% | 101.4% | 93.7% |
| Physiology | 109,607 | 85,148 | 62,008 | 104,671 | 88,246 | 60,681 | 104.7% | 96.5% | 102.2% |
| Population Health Sciences | 101,309 | 69,638 | 64,340 | 115,916 | 65,997 | 74,544 | 87.4% | 105.5% | 86.3% |
| Psychiatry | 99,067 | 68,240 | 58,016 | 100,231 | N/A | 58,044 | 98.8% | N/A | 100.0% |
| Radiology | 78,446 | N/A | 39,217 | 76,169 | 57,476 | 66,280 | 103.0% | N/A | 59.2% |
| Surgery | N/A | N/A | N/A | 76,256 | 64,977 | 36,985 | N/A | N/A | N/A |
| School of Pharmacy | 72,853 | 76,608 | 62,286 | 97,198 | 73,386 | 57,654 | 75.0% | 104.4% | 108.0% |
| Animal Health & Biomedical Sciences | N/A | N/A | 63,982 | 89,709 | N/A | 58,016 | N/A | N/A | 110.3% |
| Medical Sciences | 102,657 | 72,419 | N/A | 112,585 | 72,998 | 67,933 | 91.2% | 99.2% | N/A |
| Pathobiological Sciences | N/A | 67,322 | N/A | 95,012 | 65,961 | 62,882 | N/A | 102.1% | N/A |
| Comparative Biosciences | 96,031 | N/A | 58,016 | 93,242 | 59,486 | 65,813 | 103.0% | N/A | 88.2% |
| Surgical Sciences | N/A | 74,268 | N/A | 114,407 | 68,969 | 62,457 | N/A | 107.7% | N/A |
| **Social Studies** | **91,852** | **87,812** | **65,629** | **101,425** | **75,492** | **56,700** | **90.6%** | **116.3%** | **115.7%** |
| Agricultural & Applied Economics | N/A | N/A | 65,856 | 100,513 | 82,993 | 72,000 | N/A | N/A | 91.5% |
| Life Sciences Communication | 85,720 | 67,476 | 60,182 | 91,062 | 63,623 | 52,490 | 94.1% | 106.1% | 114.7% |
| Rural Sociology | 92,441 | N/A | 60,176 | 89,505 | 71,512 | 57,293 | 103.3% | N/A | 105.0% |
| Natural Resources-Landscape Architecture | 93,589 | 65,421 | 54,291 | 82,017 | N/A | 54,711 | 114.1% | N/A | 99.2% |
| Urban & Regional Planning | N/A | N/A | N/A | 78,575 | N/A | 55,998 | N/A | N/A | N/A |
| School of Business | 176,912 | 133,491 | 120,925 | 155,427 | 136,865 | 108,389 | 113.8% | 97.5% | 111.6% |
| Counseling Psychology | 74,911 | 70,164 | 53,012 | 86,404 | 62,066 | N/A | 86.7% | 113.0% | N/A |
| Curriculum & Instruction | 83,374 | 61,436 | 55,480 | 94,154 | N/A | 57,586 | 88.6% | N/A | 96.3% |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Educational Administration | 73,287 | 64,996 | N/A | 96,208 | 62,791 | 55,254 | 76.2% | 103.5% | N/A |
| | Educational Policy Studies | 86,727 | 66,831 | 52,346 | 90,499 | N/A | 53,606 | 95.8% | N/A | 97.6% |
| | Educational Psychology | 89,690 | N/A | 60,917 | 100,008 | 67,378 | 55,053 | 89.7% | N/A | 110.7% |
| | Rehabilitation Psychology & Special Education | 77,233 | N/A | 56,371 | 84,742 | 63,539 | 56,371 | 91.1% | N/A | 100.0% |
| | School of Human Ecology | 80,178 | 62,787 | 54,687 | 77,938 | 60,990 | 54,983 | 102.9% | 102.9% | 99.5% |
| | Law School | 123,378 | N/A | 89,466 | 132,187 | 95,314 | 90,652 | 93.3% | N/A | 98.7% |
| | Anthropology | 67,550 | N/A | 53,443 | 78,217 | N/A | 50,671 | 86.4% | N/A | 105.5% |
| | Afro-American Studies | 85,377 | N/A | 54,711 | 99,608 | 85,000 | 63,000 | 85.7% | N/A | 86.8% |
| | Communication Arts | 72,891 | 81,000 | 52,691 | 77,869 | 60,365 | 53,113 | 93.6% | 134.2% | 99.2% |
| | Economics | 128,716 | N/A | 73,674 | 180,000 | 148,750 | 80,337 | 71.5% | N/A | 91.7% |
| | Ethnic Studies | 91,071 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| | Geography | N/A | 58,137 | 53,196 | 92,844 | 60,980 | 53,846 | N/A | 95.3% | 98.8% |
| | LaFollette School of Public Affairs | 85,437 | 88,546 | N/A | 108,154 | N/A | 63,653 | 79.0% | N/A | N/A |
| | School of Journalism & Mass Communication | 91,880 | N/A | 55,449 | 72,963 | N/A | 54,470 | 125.9% | N/A | 101.8% |
| | School of Library & Information Studies | 73,463 | N/A | 55,721 | 71,528 | N/A | 54,470 | 102.7% | N/A | 102.3% |
| | Political Science | 81,648 | N/A | 53,876 | 100,750 | 74,462 | 55,346 | 81.0% | N/A | 97.3% |
| | Psychology | 98,497 | 70,500 | N/A | 101,976 | 65,543 | 57,741 | 96.6% | 107.6% | N/A |
| | Social Work | 87,487 | 72,500 | 61,600 | 88,736 | N/A | 59,115 | 98.6% | N/A | 104.2% |
| | Sociology | 101,176 | N/A | 55,721 | 110,977 | 71,881 | 54,156 | 91.2% | N/A | 102.9% |
| | Urban & Regional Planning | N/A | N/A | 56,815 | 71,393 | 63,564 | N/A | N/A | N/A | N/A |
| | School of Nursing | 87,812 | 71,566 | 60,706 | N/A | N/A | N/A | N/A | N/A | N/A |
| | Professional Development & Applied Studies | 65,159 | 52,511 | N/A | 73,172 | N/A | N/A | 89.0% | N/A | N/A |
| **Humanities** | | **76,542** | **59,911** | **50,278** | **80,450** | **59,849** | **51,292** | **95.1%** | **100.1%** | **98.0%** |
| | Art | 67,638 | 59,450 | 52,417 | 75,507 | 57,780 | 54,146 | 89.6% | 102.9% | 96.8% |
| | Dance | 62,466 | N/A | N/A | 60,940 | 58,425 | N/A | 102.5% | N/A | N/A |
| | African Languages & Literature | 78,961 | N/A | 52,024 | 84,390 | N/A | 50,352 | 93.6% | N/A | 103.3% |
| | Art History | 77,204 | N/A | 50,502 | 79,833 | 60,917 | N/A | 96.7% | N/A | N/A |
| | Classics | 77,946 | 58,814 | 51,506 | 88,274 | 59,246 | 49,652 | 88.3% | 99.3% | 103.7% |
| | Comparative Literature | 83,753 | N/A | N/A | 79,366 | N/A | 47,594 | 105.5% | N/A | N/A |
| | East Asian Languages & Literature | 84,050 | 56,864 | 47,641 | 80,181 | 60,855 | 48,000 | 104.8% | 93.4% | 99.3% |
| | English | 89,395 | 60,771 | 52,312 | 93,091 | 64,478 | 52,475 | 96.0% | 94.3% | 99.7% |
| | French & Italian | 72,190 | 56,062 | N/A | 83,324 | 67,056 | 50,671 | 86.6% | 83.6% | N/A |
| | German | 68,546 | 59,911 | 53,511 | 74,801 | 55,826 | 50,263 | 91.6% | 107.3% | 106.5% |
| | Hebrew & Semitic Studies | 72,618 | 60,783 | 52,060 | 96,276 | N/A | 51,357 | 75.4% | N/A | 101.4% |
| | History | 80,609 | 62,771 | 50,760 | 98,606 | 57,876 | 54,711 | 81.7% | 108.5% | 92.8% |
| | History of Science | N/A | 70,824 | 49,492 | 82,314 | 65,128 | 50,590 | N/A | 108.7% | 97.8% |
| | Linguistics | 73,831 | N/A | 47,641 | 85,044 | 58,238 | 50,804 | 86.8% | N/A | 93.8% |
| | School of Music | 70,422 | 64,940 | 49,654 | 76,144 | 56,268 | 51,500 | 92.5% | 115.4% | 96.4% |
| | Philosophy | 77,470 | 58,741 | 48,651 | 79,195 | N/A | 47,985 | 97.8% | N/A | 101.4% |
| | Scandinavian Studies | 77,272 | N/A | 48,877 | 66,571 | N/A | N/A | 116.1% | N/A | N/A |
| | Slavic Languages | 88,697 | 56,411 | N/A | 84,115 | 56,222 | 52,055 | 105.4% | 100.3% | N/A |
| | Languages & Cultures of Asia | 75,804 | N/A | 50,671 | 76,994 | 66,105 | 52,313 | 98.5% | N/A | 96.9% |
| | Spanish & Portuguese | 72,298 | 59,962 | 49,532 | 71,205 | 56,820 | 49,092 | 101.5% | 105.5% | 100.9% |
| | Theatre & Drama | 67,947 | 58,456 | 52,691 | 78,993 | 65,650 | 49,456 | 86.0% | 89.0% | 106.5% |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Women's Studies Program | 65,657 | N/A | 50,348 | N/A | N/A | N/A | N/A | N/A | N/A |
| School of Library & Information Studies | N/A | N/A | N/A | N/A | N/A | 66,725 | N/A | N/A | N/A |
| Liberal Studies & the Arts | 67,811 | 64,175 | N/A | 68,178 | N/A | N/A | 99.5% | N/A | N/A |

SOURCE: October 2004 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 : Margaret Harrigan, Office of Academic Planning and Analysis
February, 2005

**Table 12a. Offers Made, 2001-2004**

| Division/School | Junior Offers Made | | | Junior Offers Accepted | | | |
|---|---|---|---|---|---|---|---|
| | | | | Women | | Men | |
| | Women | Men | % Women | N | % Accept | N | % Accept |
| **Physical Sciences** | **33** | **96** | **25.6%** | **17** | **51.5%** | **52** | **54.2%** |
| College of Engineering | 17 | 46 | 27.0% | 10 | 58.8% | 30 | 65.2% |
| Letters & Sciences | 13 | 48 | 21.3% | 4 | 30.8% | 20 | 41.7% |
| College of Agricultural & Life Sciences | 3 | 2 | 60.0% | 3 | 100.0% | 2 | 100.0% |
| **Biological Sciences** | **49** | **90** | **35.3%** | **44** | **89.8%** | **76** | **84.4%** |
| Letters & Sciences | 9 | 4 | 69.2% | 9 | 100.0% | 4 | 100.0% |
| School of Veterinary Medicine | 1 | 3 | 25.0% | 1 | 100.0% | 3 | 100.0% |
| School of Pharmacy | 1 | 1 | 50.0% | 1 | 100.0% | 1 | 100.0% |
| Medical School | 30 | 62 | 32.6% | 25 | 83.3% | 49 | 79.0% |
| College of Agricultural & Life Sciences | 8 | 20 | 28.6% | 8 | 100.0% | 19 | 95.0% |

| Division/School | Tenured** Offers Made | | | Tenured** Offers Accepted | | | |
|---|---|---|---|---|---|---|---|
| | | | | Women | | Men | |
| | Women | Men | % Women | N | % Accept | N | % Accept |
| **Physical Sciences** | **6** | **18** | **25.0%** | **2** | **33.3%** | **14** | **77.8%** |
| College of Engineering | 1 | 9 | 10.0% | 0 | 0.0% | 7 | 77.8% |
| Letters & Sciences | 5 | 9 | 35.7% | 2 | 40.0% | 7 | 77.8% |
| College of Agricultural & Life Sciences | 0 | 0 | N/A | 0 | N/A | 0 | N/A |
| **Biological Sciences** | **7** | **36** | **16.3%** | **4** | **57.1%** | **25** | **69.4%** |
| Letters & Sciences | 2 | 0 | 100.0% | 0 | 0.0% | 0 | N/A |
| School of Veterinary Medicine | 1 | 1 | 50.0% | 0 | 0.0% | 1 | 100.0% |
| School of Pharmacy* | 0 | 4 | 0.0% | 0 | N/A | 3 | 100.0% |
| Medical School | 4 | 28 | 12.5% | 4 | 100.0% | 19 | 67.9% |
| College of Agricultural & Life Sciences | 0 | 3 | 0.0% | 0 | N/A | 2 | 66.7% |

* One offer decision is pending.

** Associate Professor and Professor titles.

**Table 12b. Base Salary (12 Month) Offers, 2001-2004**

| Division/School | Base Salary, Offers Made, Junior Faculty: Women Median | Women Range (K) | Men Median | Men Range (K) | Women's Median as % of Men's | Base Salary, Offers Accepted, Junior Faculty: Women Median | Women Range (K) | Men Median | Men Range (K) | Women's Median as % of Men's |
|---|---|---|---|---|---|---|---|---|---|---|
| **Physical Sciences** | **$96,000** | **$68 - $112** | **$100,667** | **$67 - $173** | **95.4%** | **$94,667** | **$68 - $108** | **$96,000** | **$67 - $123** | **98.6%** |
| College of Engineering | $101,333 | $93 - $112 | $101,480 | $88 - $123 | 99.9% | $100,667 | $93 - $108 | $101,333 | $88 - $123 | 99.3% |
| Letters & Sciences | $86,000 | $76 - $107 | $94,000 | $72 - $173 | 91.5% | $83,000 | $76 - $100 | $82,000 | $72 - $110 | 101.2% |
| College of Agricultural & Life Sciences | $68,500 | $68 - $73 | $68,000 | $67 - $69 | 100.7% | $68,500 | $68 - $73 | $68,000 | $67 - $69 | 100.7% |
| **Biological Sciences** | **$74,000** | **$47 - $104** | **$72,500** | **$40 - $116** | **102.1%** | **$73,500** | **$47 - $104** | **$71,000** | **$40 - $116** | **103.5%** |
| Letters & Sciences | $76,267 | $67 - $97 | $72,667 | $67 - $80 | 105.0% | $76,267 | $67 - $97 | $72,667 | $67 - $80 | 105.0% |
| School of Veterinary Medicine | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| School of Pharmacy | $73,333 | $73 | $84,000 | $84 | 87.3% | $73,333 | $73 | $84,000 | $84 | 87.3% |
| Medical School | $73,750 | $47 - $85 | $73,000 | $40 - $116 | 101.0% | $73,000 | $47 - $85 | $71,000 | $40 - $116 | 102.8% |
| College of Agricultural & Life Sciences | $71,000 | $68 - $104 | $71,000 | $62 - $108 | 100.0% | $71,000 | $68 - $104 | $71,000 | $62 - $108 | 100.0% |

| Division/School | Base Salary, Offers Made, Tenured Faculty: Women Median | Women Range (K) | Men Median | Men Range (K) | Women's Median as % of Men's | Base Salary, Offers Accepted, Tenured Faculty: Women Median | Women Range (K) | Men Median | Men Range (K) | Women's Median as % of Men's |
|---|---|---|---|---|---|---|---|---|---|---|
| **Physical Sciences** | **$111,334** | **$88 - $132** | **$129,000** | **$97 - $213** | **86.3%** | **$114,000** | **$96 - $132** | **$124,667** | **$96 - $160** | **91.4%** |
| College of Engineering | $126,667 | $127 | $130,667 | $120 - $153 | 96.9% | N/A | N/A | $127,333 | $120 - $153 | N/A |
| Letters & Sciences | $96,000 | $88 - $132 | $122,667 | $97 - $213 | 78.3% | $114,000 | $96 - $132 | $110,667 | $97 - $160 | 103.0% |
| 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** | **$110,000** | **$90 - $135** | **$110,000** | **$52 - $213** | **100.0%** | **$106,000** | **$90 - $135** | **$110,000** | **$52 - $160** | **96.4%** |
| Letters & Sciences | $112,667 | $100 - $125 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| School of Veterinary Medicine | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| School of Pharmacy* | N/A | N/A | $120,000 | $97 - $173 | N/A | N/A | N/A | $100,000 | $97 - $140 | N/A |
| Medical School*** | $106,000 | $90 - $135 | $110,000 | $52 - $213 | 96.4% | $106,000 | $90 - $135 | $110,000 | $52 - $160 | 96.4% |
| College of Agricultural & Life Sciences | N/A | N/A | $132,500 | $90 - $147 | N/A | N/A | N/A | $139,584 | $133 - $147 | N/A |

* 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, 2001-2004**

| 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** | **$23 - $818** | **$190,320** | **$14 - $1286** | **104.5%** | **$219,000** | **$48 - $536** | **$198,475** | **$23 - $662** | **110.3%** |
| College of Engineering | $199,720 | $64 - $600 | $255,527 | $65 - $662 | 78.2% | $209,360 | $68 - $536 | $247,250 | $65 - $662 | 84.7% |
| Letters & Sciences | $136,300 | $23 - $818 | $152,600 | $14 -$1286 | 89.3% | $234,007 | $48 - $454 | $118,900 | $23 - $631 | 196.8% |
| College of Agricultural & Life Sciences | $228,000 | $176 - $242 | $311,750 | $178 - $446 | 73.1% | $228,000 | $176 - $242 | $311,750 | $178 - $446 | 73.1% |
| **Biological Sciences** | **$232,000** | **$50 - $540** | **$232,500** | **$34 - $485** | **99.8%** | **$231,500** | **$50 - $540** | **$227,500** | **$34 - $485** | **101.8%** |
| Letters & Sciences | $171,500 | $81 - $324 | $240,241 | $191 - $485 | 71.4% | $171,500 | $81 - $324 | $240,241 | $191 - $485 | 71.4% |
| School of Veterinary Medicine | $330,556 | $331 | $214,000 | $201 - $255 | 154.5% | $330,556 | $331 | $214,000 | $201 - $255 | 154.5% |
| School of Pharmacy | $539,900 | $540 | $310,000 | $310 | 174.2% | $539,900 | $540 | $310,000 | $310 | 174.2% |
| Medical School | $245,500 | $50 - $500 | $237,500 | $34 - $440 | 103.4% | $231,000 | $50 - $500 | $230,000 | $34 - $440 | 100.4% |
| College of Agricultural & Life Sciences | $242,000 | $173 - $450 | $222,250 | $108 -$452 | 108.9% | $242,000 | $173 - $450 | $225,000 | $108 -$452 | 107.6% |

| 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** | **$94 - $711** | **$144,800** | **$5 - $734** | **145.8%** | **$211,075** | **$192 - $230** | **$143,400** | **$5 - $734** | **147.2%** |
| College of Engineering | $306,787 | $307 | $154,000 | $69 - $734 | 199.2% | N/A | N/A | $154,000 | $69 - $734 | N/A |
| Letters & Sciences | $191,900 | $94 - $711 | $143,200 | $5 - $550 | 134.0% | $211,075 | $192 - $230 | $143,200 | $5 - $210 | 147.4% |
| 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** | **$186,000** | **$54 - $425** | **$327,500** | **$160 - $1350** | **56.8%** | **$243,000** | **$54 - $425** | **$321,000** | **$160 - $810** | **75.7%** |
| Letters & Sciences | $123,000 | $106 - $141 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 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 | $742,847 | $517 - $1350 | N/A | N/A | N/A | $676,009 | $517 - 810 | N/A |
| Medical School | $243,000 | $54 - $425 | $310,500 | $160 - $600 | 78.3% | $243,000 | $54 - $425 | $270,000 | $160 - $425 | 90.0% |
| College of Agricultural & Life Sciences | N/A | N/A | $400,000 | $398 -$450 | N/A | N/A | N/A | $424,000 | $398 -$450 | N/A |

* Total Startup Package does not include Base Salary.
** One offer decision is pending.