



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

2003

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, 2003; Revised May, 2004

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I. Executive Summary: Major Accomplishments in Year 2

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

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

- Developed, piloted, and launched campus-wide workshops on hiring practices that includes familiarizing search committee chairs with the research indicating bias in evaluation of women candidates.
- Developed and piloted an innovative workshop series for department chairs to improve climate, to be fully launched in 2004. The workshop provides chairs with national- and campus-level data about climate and gender biases as well as the opportunity to conduct an electronic survey to assess their own department’s climate. The discovery-based approach involves chairs working in small groups to devise solutions to each others’ climate problems.
- Placed WISELI Leadership Team members in key positions that have influence over gender-related policy and practice. These include: Bernice Durand, Associate Vice Chancellor for Diversity and Climate; Patti Brennan, University Committee; Caitilyn Allen, Biological Sciences Divisional Committee; Molly Carnes, Campus Planning Committee Liaison; Cecilia Ford, co-chair of the Committee on Women in the University.
- Conducted campus-wide surveys of climate for faculty and staff, initiated analysis, and reported preliminary results to several groups, including the Chancellor, Provost, and all of the deans.
- Forged partnerships with the Provost’s Office and the Graduate School for WISELI initiatives. They have provided substantial financial resources as well as personnel dedicated to launching our initiatives campus-wide.

- Completed the first video documenting WISELI's impact on campus. Public screening of the video will occur in early 2004¹.
- Provided guidance and assistance in resolution of issues for five senior women, preventing departures, resignation from leadership positions, and possible lawsuits; assisted in two tenure cases that have been resolved successfully.
- Awarded eight new Celebrating Women in Science & Engineering grants. One award was used to bring Prof. Virginia Valian to campus for a series of meetings with department chairs, high-level administrators, and women faculty, in addition to a well-attended public lecture.
- Advice and expertise was sought out by Office of the Provost in the creation of an exit interview protocol and instrument for faculty leaving employment at the UW-Madison.
- Enhanced the WISELI seminar where research on women in science and engineering is presented and discussed by moving to a larger space, adding a third seminar each semester, and providing an opportunity for continued discussion as a follow-up to each lecture.
- In partnership with the Graduate School, provided funding for 4 men and women faculty during vulnerable junctures in their research through the Life Cycle Research Grant initiative.
- Continued an ethnographic study of men and women faculty in science and engineering that has resulted in one peer-reviewed publication to date, with more in the pipeline.
- Analyzed in-depth interview data from a stratified random sample of 41 women faculty and academic staff in the sciences and engineering.
- Completed and evaluated semi-structured conversations with 40 of the 81 women full professors in the biological and physical science divisions.
- Began discourse analysis of men and women's conversation in naturally-occurring academic meetings.

¹ Event took place March 1, 2004.

II. Comments from Campus Leaders about WISELI

THE
**GRADUATE
SCHOOL**
UNIVERSITY OF WISCONSIN-MADISON

March 8, 2004

Dr. Alice Hogan
National Science Foundation

Re: Women in Science and Engineering Leadership Institute at the University of Wisconsin-Madison

Dear Dr. Hogan:

Professors Molly Carnes and Jo Handelsman have asked me to provide an evaluation of the Women in Science and Engineering Leadership Institute (WISELI) at the University of Wisconsin-Madison. I am happy to do so, as I believe that WISELI has already had a major impact on the way we do things at the university. I am convinced that in the years to come we will benefit substantially from the institutional transformation that WISELI has initiated.

Let me be specific. As Dean of the Graduate School, I have been personally involved in the development of the Life Cycle Research Grant program. Indeed, I and my colleagues were so impressed by this program that we have supplemented it with Graduate School funds. This initiative provides funding for faculty at pivotal moments in their research careers, when research productivity has been negatively affected by personal life events, such as complications from childbirth or the illness of a spouse. The program has changed the institutional culture by providing bridge funding for other than purely academic reasons; it explicitly recognizes that faculty are human resources that should be nurtured during difficult life events.

I have also been involved in the Faculty Work-Life Survey. The initial interviews with women faculty on campus not only gave us insights into the overall environment for women in the sciences and engineering, but also uncovered situations where we could be of immediate assistance. Indeed, in one such case, WISELI alerted me to a structural issue that was having a negative impact on the research and teaching productivity of one of our senior women faculty members. Thanks to their advice and sensitivity, I was able to intervene and make the necessary administrative adjustments. I am confident that the qualitative and quantitative information that is being gleaned from the surveys will provide invaluable benchmarks with which to guide and measure our progress. As a social scientist by training, I am impressed by the variety of sophisticated methodologies and techniques that are being utilized.

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Dr. Alice Hogan
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As a third example, let me briefly comment on the Workshops for Building Effective Research Teams. This WISELI initiative aims to educate principal investigators, and others, with respect to creating collegial working environments in research laboratories and offices. Again, the Graduate School has been so impressed by this program that we have asked to collaborate. If the pilot experiments are successful, which I fully expect them to be, we will institutionalize these workshops by incorporating them into an existing series involving research policy and practice. By urging us to recognize and value the importance of collegial and mutually reinforcing research teams, WISELI is transforming the institutional environment and helping us to nurture our human resources in more holistic ways.

These are just three concrete examples of what WISELI has meant for this campus. I could list many more. More importantly, examples such as these have multiplier effects; they spillover and have positive impacts in a wider variety of arenas than originally imagined. The leadership of Professors Molly Carnes and Jo Handelsman has been a vital ingredient of this success story. Their wisdom, wit, and good humor has persuaded their colleagues, female and male alike, that we really can make a difference with respect to the role of women in science and engineering.

I have been a member of the faculty at the University of Wisconsin-Madison for thirty years, and an administrator for fourteen of those years. During that time I have seldom seen an initiative that is so compelling; where the goals are so clearly articulated, the leadership so persuasive, and the whole endeavor so well organized and coordinated.

Please feel free to contact me if I can be of further assistance.

Yours sincerely,



Martin T. Cadwallader
Vice Chancellor for Research
and Dean of the Graduate School



March 9, 2004

Dr. Alice Hogan
National Science Foundation
Washington, DC

Dear Dr. Hogan:

As a member of the WISELI leadership team, and the dean of the College of Engineering, I am in a unique position to observe the impact of WISELI activities in our college. I can point to three recent and important examples:

- The Department of Biomedical Engineering recently volunteered to be a pilot department for the WISELI climate survey project. Faculty members filled out the survey and the results were discussed at a faculty workshop. The results revealed that the climate in the department was generally perceived as welcoming and inclusive. Even more important was the opportunity to discuss issues in the survey as a group in a workshop setting. According to the department chair, Rob Radwin, "We are a new and small department, with a very supportive faculty and staff, so the result was not too surprising. But the workshop sensitized me as chair to potential problems that I will try to avoid as our department grows and matures. We will monitor the climate again in years to come."

Professor Radwin has been sharing his positive assessment of this experience with other department chairs. This has helped create an atmosphere of not only acceptance of this type of activity, but one of enthusiastic support for the long-term effect it can have.

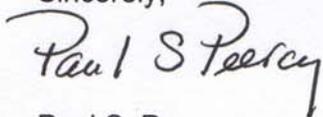
- We give a lot of credit to the influence of WISELI in helping create a lactation space in the college for engineering women faculty, staff and students. While attending a WISELI leadership team meeting, one of our faculty members—Professor Amy Wendt—participated in a discussion of childcare needs and university space. WISELI leadership team member Linda Greene mentioned the importance of bringing up childcare-related facilities as new building plans are formulated. Professor Wendt noted that the college is planning a new Mechanical and Industrial Engineering Building and recalled the lack of lactation space for nursing mothers who need a private place to pump their breast milk while at school or work in the college. During her own time as a nursing mother, Professor Wendt was lucky enough to have a private office for breast pumping. However, one of her students and a post-doc had problems finding private space. She also recalled a faculty candidate in electrical and computer engineering and an out-of-town visitor to a workshop who both needed a private area for pumping. In talking with other women, the need was clearly widespread, yet it had not been discussed with administration.

Professor Wendt brought up the need for a lactation space in engineering at the WISELI board meeting with our Associate Dean Pat Farrell in attendance. The idea was enthusiastically embraced. We recently met with a team of women faculty and students and approved the idea. We have identified appropriate space in the building that can be modified to meet the need. We have also located interim space that can be used until the Mechanical and Industrial Engineering Building project is completed. This alternate space should be available in a couple of weeks, after minor modifications are completed. It is my firm belief that the WISELI leadership team meetings gave this issue a forum to easily and comfortably introduce this topic. The enthusiastic response this idea received at this meeting gave women faculty the impetus to make a formal request of engineering administration. As a result, we are just a couple of weeks away from meeting this need for faculty, staff and students who are nursing. Once the room is set up, we intend to publicize it to prospective women faculty, staff and graduate students. A member of the organizing team recently wrote, "Please join with me and others of your colleagues in thanking Dean Peercy and the college for their generous support in providing a warm and supportive environment for women, and for family issues!" I must add WISELI to that list for its role in helping to bring the issue to our attention.

- Training that we provided faculty search committees, with help from WISELI, helped us create an immediate, impressive improvement in recruiting women faculty. The workshops sensitized our search committees to two factors of great concern to prospective women faculty: dealing with spousal hires very early in the recruiting process and making an offer promptly after the interview. Before this training, our yield rate on offers to faculty candidates was less than 50 percent, and less than 35 percent for women. After the training, with attention to these issues, our latest round of faculty offers yielded 90 percent acceptances, allowing us to add six women faculty members, two-thirds of the faculty members added last year.

These examples are only three tangible instances of the success of early WISELI efforts. Perhaps more importantly, WISELI raised the overall faculty and staff awareness of women's issues in the College of Engineering and across campus. It is clear to me that their presence on our engineering campus has been widely accepted as needed, effective and important. I am very happy that the leaders of WISELI selected the College of Engineering to house the program.

Sincerely,



Paul S. Peercy
Dean



March 11, 2004

Dr. Alice Hogan
National Science Foundation
c/o Women in Science and Engineering Leadership Institute
University of Wisconsin-Madison
2640 Engineering Hall
1415 Engineering Drive
Madison, WI 53706-1691

Dear Dr. Hogan:

The Women in Science and Engineering Leadership Institute (WISELI), created and led by Dr. Jo Handelsman and Dr. Molly Carnes with the NSF ADVANCE grant funding, already is making a significant impact on our campus in a number of important areas. We feel extremely fortunate to have this opportunity to be a part of an initiative that seeks to identify, create, and institutionalize practices that can enhance the participation of women in science and engineering fields within research institutions such as UW-Madison.

The WISELI project has taken a number of existing campus efforts to a much higher and more sustained level. WISELI initiatives have infused our existing activities with new energy and generated invaluable data that can be used for process improvement. The project also has developed new initiatives that I am certain will have longstanding consequences for how we recruit and retain outstanding women faculty and staff in science and engineering disciplines. WISELI has identified key organizational features and leverage points to affect change.

One of the initial projects undertaken by the WISELI team here at UW-Madison was a baseline "worklife" survey of all faculty and a sample of our academic staff. Results from the survey, now being analyzed by a team of WISELI researchers, will provide valuable information for prioritizing among several initiatives, including efforts to enhance the workplace climate of departments and laboratories, mentoring of women faculty, and training and development of department chairs and other campus leaders.

The WISELI leadership team also moved quickly to develop a series of key workshops for campus leaders on issues that have significant impact across campus. The Workshops for Search Committee Chairs provide vital just-in-time information and guidance that help our campus conduct more equitable searches for faculty members. The concrete products from this initiative are extremely valuable to all of the units on campus that are conducting searches. Moreover, they are providing a template that we can use for all faculty searches, not just those in science and engineering, and they apply to diversifying our faculty in terms of race as well as gender.

Office of the Provost and Vice Chancellor for Academic Affairs

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One of the key documents WISELI created in conjunction with these workshops for search committees is a brochure titled, "Reviewing Applicants – Research on Bias and Assumptions." The brochure draws upon social science research to document some of the common biases and assumptions that often adversely affect the ultimate selection of underrepresented populations for faculty positions. The strategy of using replicable research findings to demonstrate the impact of biases and assumptions is a very powerful strategy at a research university. This strategy is affecting not only the realm of faculty searches but also other arenas where the work of faculty is evaluated. For example, we already have heard from several of our divisional committee chairs that they are incorporating tips from the WISELI brochure in their deliberations for promotion decisions. I believe this brochure will have a widespread and lasting impact on this campus by educating faculty and staff and changing the way in which applicants and candidates for promotion are evaluated by their peers.

The WISELI leadership team is making important contributions in the area of campus climate as well. The WISELI-led Climate Workshops for Department Chairs is an initiative that was piloted in science and engineering departments, but soon will be offered to all of our department chairs this spring. The approach WISELI has taken with these workshops, including the use of tailored surveys of department climate and a chair-to-chair consultation process, will have an impact across our campus by creating a concrete and relatively simple process for department chairs to research or study the climate in their units, identify possible interventions, and evaluate the impact of those interventions at a later date. This "action research" process is a good fit for the manner in which many of our faculty members approach research in their own disciplines. Hence, I predict the approach will become more widely used and institutionalized as our institution continues to work to enhance the climate for all employees and students.

The WISELI initiatives are generating a number of key practices and system-wide changes in process that will have a long-term impact on this campus and will be reflected in our hiring, promotion, and retention figures. I strongly believe this project will result in significant, measurable improvements on our campus in numerous areas.

Key to the success of the WISELI project is the outstanding leadership of Dr. Carnes and Dr. Handelsman. These two individuals have the vision of what we can accomplish as an institution, they have the organizational and management skills to implement the vision, and they have the interpersonal skills to make it all happen. Change is very difficult to accomplish, particularly on a university campus, and social change is perhaps most difficult of all. Through their outstanding leadership and ability to work collaboratively with students, staff, faculty, and administrators, Drs. Carnes and Handelsman have made truly remarkable progress in helping UW-Madison accomplish needed change.

Sincerely,



Peter D. Spear
Provost and Vice Chancellor for Academic Affairs

III. Activities: Status of WISELI Initiatives

A. Workplace Interactions

Climate Workshops for Department Chairs

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

Workshops for Search Committee Chairs

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

Workshops in Building Effective Research Teams

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

B. Life-Career Interface

Life Cycle Grants

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

Time-Stretcher Services

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

C. Development, Leadership, Visibility

Celebrating Women and Science and Engineering Grants

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

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

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

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

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

WISELI leaders have been intimately involved in this process, meeting with the department chairs and providing detailed advice on tactics to the candidates. In the 4th case, WISELI has provided guidance and editing of the tenure documents.

- Administrative difficulties identified include achieving tenure for work based on scholarship in teaching, which is extremely difficult to do in the sciences. The attitudinal difficulties include: (1) helping existing departmental faculty to view the staff member as a colleague—a required attitudinal shift as their vote is required to make a successful conversion, and (2) the willingness of women academic staff themselves to challenge the status quo in their departments.

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

Senior Women Faculty Initiative

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

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

Nominations and Awards for Women Faculty

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

Endowed Professorships for Women in Science

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

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

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

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

D. Overarching

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

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

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

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

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

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

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

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

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

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

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

- o Jennifer Sheridan, WISELI Research Director. “Faculty Worklife at the University of Wisconsin-Madison: Preliminary Findings”
- **WISELI Website.** In 2003, the website continued to grow. We continue to post news about UW-Madison women scientists and engineers, and to post events related to women in science (WISELI sponsored or not.) Our web counter shows over 3000 hits as of the end of 2003.
- **WISELI Listserv.** The WISELI listserv has become a reliable way to communicate with our affiliates. Other organizations (e.g., the Provost’s Office, the UW-Madison Oral History Project, and others) have been asking us to post notices to our listserv to further inform our affiliates of events and opportunities. At the end of December, 2003, we have 196 affiliates on our listserv.
- **Working Web Site (WWS).** We compile resources, post working documents, provide links to sites and resources of interest, and more on our Working Web Site. This site is password protected. We give access to the WWS to persons on a case-by-case basis, and try to limit access especially to off-site persons. It has become an effective way to share our working documents and research with interested parties before the documents are ready to go “public.”
- **Outreach to campus/national groups.** We have presented to many groups about WISELI and our activities. A list of our publications and presentations is attached (Appendix 7.) Some of the presentations about WISELI itself include:
 - o “The University of Wisconsin-Madison ADVANCE Program: Progress to Date.” June, 2003 presentation at the WEPAN meetings, Chicago.
 - o “NSF ADVANCE at UW-Madison: WISELI Activities.” September, 2003 presentation at the 25th anniversary of the Women in Computer Science and Engineering Organization, Berkeley.
 - o “Increasing Representation and Advancement of Women in Academic Science and Engineering Careers through Institutional Transformation: The NSF ADVANCE Award at UW-Madison.” November, 2003 presentation to the University League, Madison.
 - o “WISELI.” November 2003 presented at the University of Washington’s Center for Institutional Change (CIC), Seattle.

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

Documentary Video

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

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

Evaluation/Research

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

- o A new paper on gendered communication in the lab setting is underway.
- ***Discourse Analysis of the “Ignoring-my-ideas” Phenomenon.***
 - o Many meetings (female-only meetings as well as mixed-gender meetings) have been videotaped and transcribed, and are undergoing analysis. Research is focusing on how an idea is “taken up” by a group, in order to more accurately understand how such ideas are ignored when presented by women. In the future, collaboration between this study and the ethnographic study described above is a possibility.
 - o “Gender and Language in/as/on Academic Science: Combining Research with a Commitment to Institutional Change.” Presented at the Perception and Realization in Language and Gender Research Conference, July 2003, East Lansing, MI.
 - o “Gender and Talk: Looking Back and Looking Forward.” Presented at the Women’s Health Forum of the UW-Madison Center for Women’s Health and Women’s Health Research, September 2003, Madison.
 - o “Gender and Language in/as/on Academic Science: Combining Research with a Commitment to Institutional Change.” In progress.
 - o “Getting our Voices Heard: Patterns of Participation in University Meetings” will be presented at the WISELI seminar in February, 2004.
- ***Study of Career Choices in Engineering.*** A new research study, designed by Prof. Amy Wendt (WISELI Leadership Team member.) She will interview women graduate students, postdocs, and newly-hired junior faculty in Engineering at the UW-Madison and the University of Washington. The goal of the study is to understand what factors women consider when deciding whether to pursue a career in academic engineering, and how distinctive features of the ADVANCE programs at the two institutions are affecting those choices.
- ***Examine the patterns of assigning institutional resources for uneven distribution by gender.***
 - o Collection of data on space for faculty in the biological and physical sciences almost complete as of 12/31/03. We have data from the College of Engineering, School of Pharmacy, and School of Veterinary Medicine. We will receive data from the College of Letters & Sciences, College of Agricultural & Life Sciences, and Medical School in early January.
 - o In 2004/2005, we plan to examine teaching load and assignment of teaching/clinical assistants, by gender.
 - o In 2004/2005, we plan to examine distribution of University grant funds.
- ***Evaluation of Existing Gender Equity Programs.*** We proposed to evaluate nine campus programs related to gender equity. Data from the Faculty and Academic Staff Worklife surveys will be the primary source of information about these programs. These data were released to us in Summer 2003, and thus evaluation of these programs began after the preliminary analyses of the data. The programs we will evaluate, with an expected completion date, include:
 1. Gender Pay Equity Study. We plan to use survey results to assess perceptions of the gender pay equity exercise of 2001/02. Expected completion 2005.

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

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

Workshops for Faculty and Staff

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

IV. Findings: Value Added

Tangible outputs

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

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

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

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

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

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

Increased awareness of gender equity issues among women scientists and engineers

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

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

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

Contributions to gender equity programs nationally

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

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

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

V. Findings: Difficulties & Solutions

Administration and structure

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

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

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

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

Difficulties with initiative implementation (specific and general)

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

An additional challenge with this initiative is the tendency of some departments to merely ask for funds to do “business as usual.” That is, a couple of applicants who had already invited women scientists and engineers to present their work asked us for money to cover the women’s cost. Presumably, this would free up funds to pay for more men in the schedule! We tried to avoid this situation by giving “priority” to those units that (1) contributed their own funds to the event, or (2) had no funds to give. Under (2) falls some student groups such as the Graduate Women in Science (GWIS). We added this message of “priority” to the RFP to signal that we wanted to see a unit’s commitment to our goal of increasing the visibility of women in the sciences and engineering.

- Compromises made during institutionalization. Because of our close ties to the Office of the Provost, we have been extraordinarily successful at “institutionalizing” some of our initiatives earlier than we thought we might. This has required us, however, to modify our original plans and designs to accommodate the needs of the campus. The best examples are our two workshop series—one to train chairs of hiring committees to perform less-biased searches, and one to work with department chairs on improving climate in their units. As these workshops are offered out of the Provost’s Office, rather than WISELI, we have had to forego some of the more intensive evaluation we had planned. In addition, the organization of the workshops has changed (e.g., one of the workshops was designed to be three sessions, and it has been shortened to one or two sessions.)

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

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

Overall campus perceptions and attitudes

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

Reaching male faculty is especially important, and we are looking at ways to expressly reach out to “sympathetic” men on campus, perhaps through creation of a “WISELI Fellows” program. The “WISELI Fellows” would be an honorific title (no funds are to be awarded) given to a faculty member who will help us further our agenda within the person’s department or discipline (e.g., by watching for bias in tenure/hiring decisions, ensuring all voices are heard at meetings, helping us strategize to increase our impact among faculty, making sure women are placed on important committees, etc.)

- Gender is still not a visible issue at the bench-level. While many people feel that the presence of an ADVANCE grant on the UW-Madison campus has increased visibility

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

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

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

Evaluation difficulties

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

VI. WISELI Management and Infrastructure

Directors

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

Staff

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

Leadership Team

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

Internal Advisor: Linda Greene, Assoc. Vice Chancellor

Evaluation Team

Evaluation Director: Christine Maidl Pribbenow
Deveny Benting, Cecilia Ford, Ramona Gunter, Margaret Harrigan, Jennifer Sheridan, Amy Stambach, John Stevenson

Administrative Partners

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

Campus Affiliates

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

External Advisory Team

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

VII. Financial Reports

2003 Financial Report

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

2004 Proposed Budget

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

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

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

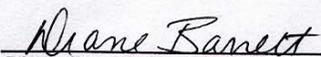
Cost Sharing Summary (January 1 - December 31, 2002)

WISELI

Project dates: January 1, 2002 - December 31, 2002

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

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



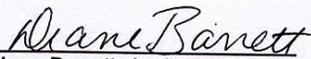
Diane Barrett, Assistant Director, Pre-Award Services
Research & Sponsored Programs

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

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

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

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


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

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

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

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

* Year 1 Certified.

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

1 - Includes faculty and staff salaries and fringe benefits for the year beginning 1-1-03 through 12-31-03.

2 - Graduate student support is for: 1 Research Assistant at 50% beginning 7/1/03 through 6-30-04; 1 Project Assistant at 33% beginning 9/1/02 through 1/30/03; 1 Project Assistant at 50% beginning 10/1/03 through 6/1/04.

3 - Funds for Celebrating Women in Science & Engineering Grant program.

4 - Includes program support and undergraduate support for the Women in Science and Engineering Undergraduate program

5 - Includes funds for documentary video project, survey of faculty and staff, the Life Cycle Research Grant Program, and Miscellaneous support from the College of Engineering (\$10,000/year).

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

Jo Handelsman Current and Pending Support January 2004

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

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

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

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

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

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

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

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

CARNES, MARY L. (MOLLY)

Active:

Project Number: 0123666 **Type:** Cooperative agreement P.I.: M. Carnes, 50% effort

Title: ADVANCE, Institutional Transformation Award

Source: National Science Foundation

Dates of Project: 1/1/02 – 12/31/06

Annual Direct Costs: \$515,347

Goals: This grant proposes to use UW-Madison as a living laboratory to study why we have been relatively unsuccessful and how we can become more successful in recruiting, retaining, and advancing women in academic science and engineering.

Project Number: 213-98-0017 **Type:** Contract effort

P.I.: M. Carnes, 17% effort

Source: US PHS, Office on Women's Health

Title: University of Wisconsin National Center of Excellence in Women's Health

Dates of Project: 10/1/98 - 9/30/06

Annual Direct Costs: \$145,000

Goals: This contract designates the UW as having one of 18 National Centers of Excellence in Women's Health.

The goals are to educate women to be knowledgeable consumers of health care; to advocate for models of clinical care model that promote optimal health of all women; to develop women leaders in academic health sciences; to develop a national multidisciplinary agenda for women's health research; and to educate providers to provide culturally sensitive care to diverse populations of women.

Project Number: T32 AG00265 **Type:** NRSA Institutional Training Grant P.I.: M.Carnes, 10% effort (no salary)

Source: National Institute on Aging

Title: Women's Health and Aging: Research and Leadership Training Grant

Dates of Project: 7/99 – 6/04

Annual Direct Costs: \$214,922

Goals: This grant provides post-doctoral salary and research support for four MD or PhD fellows per year.

The goals are to develop academic leaders in older women's health by supporting them to do progressively independent research in the laboratories of established scientists. Effort devoted to this grant integrates with the goal of the DHHS Center of Excellence contract.

Project Number: K12AG19247 **Type:** Institutional Mentored Scientist Award P.I.: M. Carnes, 10% effort (no salary)

Source: National Institute on Aging

Title: Women's Health and Aging: Clinical Scientist Development Program

Dates: 9/01/02 – 8/31/07

Annual Direct Costs: \$339,300

Goals: This grant provides salary support for clinical scientists to do research in women's health and aging. The goal is to develop a cadre of researchers in the area of older women's health who are excellent scientists imbued with an interdisciplinary perspective, effective communicators, and managers of independent research programs. Effort devoted to this grant integrates with the goal of the DHHS Center of Excellence.

Pending:

Type: Louis Stokes AMP PI: P. Spear; co-PI's: M. Carnes, 10% effort (no salary), D. Henderson

Source: National Science Foundation

Title: Wisconsin Alliance for Minority Participation

Dates: 5 years from start of funding

Annual Direct Costs: \$287,146

Goals: This grant will support efforts to enrich the pipeline of academic science and engineering with diverse trainees by drawing together 21 institutions of higher education in the State of Wisconsin to commit to doubling the number of underrepresented minority students awarded baccalaureate degrees in science and engineering with an eye toward graduate education. Efforts devoted to this cooperative agreement are congruent with Dr. Carnes' service as a faculty member to the State and University of Wisconsin.

IX. Quantitative Indicators of Activity and Progress

X. Appendices

Appendix 1: Materials for Chair Climate Workshops

Appendix 2: Materials for Search Committee Chair Workshops

Appendix 3: Life Cycle Research Grant Summary

Appendix 4: Virginia Valian Luncheon Evaluation

Appendix 5: Senior Women Faculty Notes

Appendix 6: “Advancing Your Career Through Awards and Honors”

Appendix 7: WISELI Publications and Presentations

Appendix 8: “As Balancing Act and Game”

Appendix 9: Women Faculty Mentoring Program Evaluation