



# W I S E L I

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

**ADVANCE Institutional Transformation Program**  
National Science Foundation  
\$3,750,000  
January 2002 – June 2007

- Objective** NSF ADVANCE at the University of Wisconsin-Madison was a five-year project to promote institutional transformation in science and engineering fields by increasing the participation, success and leadership of women faculty in academic science and engineering. The grant was administered through the **Women in Science & Engineering Leadership Institute (WISELI)**, an institutionalized research center.
- Constituents** Science and engineering faculty and staff in the **six schools** with the largest science and engineering faculty: College of Engineering, College of Letters & Sciences, College of Agricultural and Life Sciences, the School of Veterinary Medicine, the School of Pharmacy, and the School of Medicine and Public Health. We target **70 departments/units and 1,200 faculty** in the biological and physical sciences.
- Activities** With a strong evaluation component in all that we do, our research and initiatives feed back to each other, improving our activities with each iteration.



### Grant Programs

- Vilas Life Cycle Professorship Program
- Celebrating Women in Science & Engineering Grants

### Workshops

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

### Other Initiatives

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

### Evaluative Research

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

### Other Research

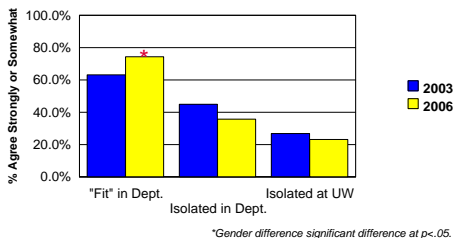
- Discourse analysis of women's communication strategies
- Ethnographic study of gendered interactions in the laboratory setting
- Study of Career Choices in Engineering
- Expanding Entrepreneurial Activity for Senior Women

## Selected Results

### Climate

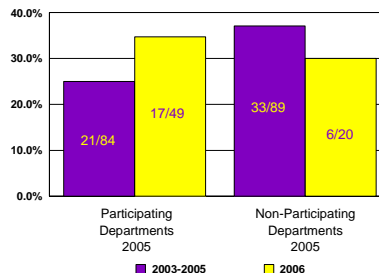
#### Isolation and "Fit"

Women Faculty in Biological & Physical Sciences



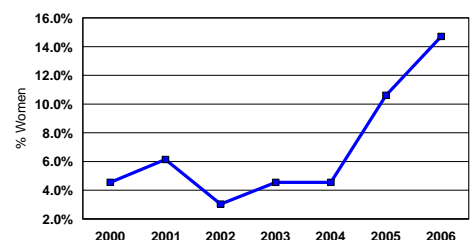
### Hiring

Percent Female, New Tenure-Track Faculty  
Biological & Physical Sciences



### Leadership

Percent Women Department Chairs  
Physical & Biological Science Departments



- Significant increase in the percentage of women faculty who felt they "fit" in their departments.
- Women faculty in bio. and phys. sciences reported less isolation in 2006 than in 2003, both in their departments and at UW-Madison.
- Departments sending at least one faculty member to our workshops for search committee chairs showed an increase in new women hires; non-participating departments showed a decrease in new women hires.
- At beginning of grant period (2002), there were only 2 women department chairs (of 68). By 2006, UW-Madison had 10 women chairs in the 68 biological and physical science departments.

**Products (see <http://wiseli.engr.wisc.edu/products.htm>):**

- Climate:**
- *Benefits and Challenges of Diversity*
  - *Enhancing Department Climate: A Chair's Role: Resources*
  - *Advice to the Top: Top 10 Tips for Academic Leaders to Accelerate the Advancement of Women in Science and Engineering*
  - *Sex and Science: Tips for Faculty*
  - *Study of Faculty Worklife at the University of Wisconsin-Madison* (survey instrument and results)
- Hiring:**
- *Recruiting Applicants: Research on Bias and Assumptions (2<sup>nd</sup> Edition)*
  - *Searching for Excellence and Diversity: A Guide for Faculty Search Committee Chairs*
- Selected Publications:**
- Gunter, R. and Stambach, A. 2003. "As Balancing Act and as Game: How Women and Men Science Faculty Experience the Promotion Process." *Gender Issues*. 21(1):24-42.
  - Gunter, R. and Stambach, A. 2005. "Differences in Men and Women Scientists' Perceptions of Workplace Climate." *Journal of Women and Minorities in Science and Engineering*. 11(1):97-116.
  - Handelsman et al. 2005. "More Women in Science." *Science*. 309(5738):1190-1191.
  - Carnes et al. 2005. "Diversity in Academic Medicine: The Stages of Change Model." *Journal of Women's Health*. 14(6):471-475.
  - Carnes et al. 2005. "NIH Director's Pioneer Awards: Could the Selection Process be Biased Against Women?" *Journal of Women's Health*. 14(8):684-691.
  - Sheridan et al. 2006. "Discovering Directions for Change in Higher Education Through the Experiences of Senior Women Faculty." *Journal of Technology Transfer*. 31(1):387-396.
  - Carnes, M. and Bigby, J. 2007. "Jennifer Fever in Academic Medicine." *Journal of Women's Health*. 16(3):299-301.
  - Carnes, M. and Bland, C. 2007. "A Challenge to Academic Centers and the NIH to Prevent Unintended Gender Bias in Selection of CTSA Leaders." *Academic Medicine*. 82(2):202-206.
  - Ford, C. 2007. *Women Talking in the Workplace: Getting and Using the Floor*. New York: Palgrave Macmillan.
  - Ford, C. In press. "Questioning in Meetings: Participation and Positioning." In *The Function of Questions in Institutional Discourse* (S. Erlich and A. Free, Eds.) Oxford University Press.
- Awards & Honors:**
- *Advancing Your Career through Awards and Recognitions: A Guide for Women Faculty in the Sciences & Engineering*
- Documentary Videos:**
- *WISELI: Advancing Institutional Transformation*
  - *WISELI: Building on a Legacy*
  - *WISELI: FORWARD with Institutional Transformation*

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