



W I S E L I

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

Program: **ADVANCE Institutional Transformation**
Funding Agency: National Science Foundation
NSF Program Officer: Alice Hogan (ahogan@nsf.gov)

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

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

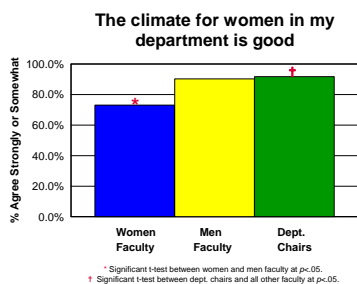
- Interviews with women faculty and staff
- Study of Faculty and Academic Staff Worklife (climate survey)
- Resource studies
- Issue Studies
- Evaluation of existing programs at UW-Madison

Other Research

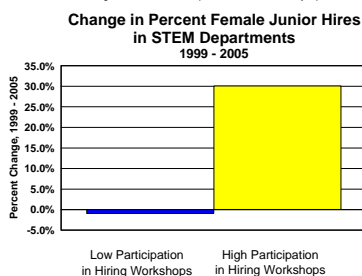
- Discourse analysis of women's communication strategies
- Ethnographic study of gendered interactions in the laboratory setting
- Study of Career Choices in Engineering
- Expanding Entrepreneurial Activity for Senior Women

Selected Results

Climate:



Hiring:



- Climate survey and interviews with women faculty identify **DEPARTMENT CHAIRS** as key influences on the experiences of women faculty.
- To date, 27 department chairs have participated in our Climate Workshops; the improvements made as a result of this will affect thousands of faculty and staff in those departments.
- Climate will be re-assessed in select departments to evaluate the overall effects of the Climate Workshops.
- New faculty hires in STEM have increased overall, from 18% women in 2002, to 21% in the 2005 hiring cycle.
- Departments who participate in WISELI workshops (2003-2005) show more gains in hiring women (30% increase) than those departments who have not participated (no change).
- Approximately 70 hiring committee chairs have participated in our training workshops in 2004, and 92 participated in 2005.
- Evaluation of composition of hiring pools is underway.

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)
- Recruiting:**
- *Recruiting Applicants: Research on Bias and Assumptions*
 - *Searching for Excellence and Diversity: A Guide for Faculty Search Committee Chairs*
- Papers:**
- 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).
- Awards & Honors:**
- *Advancing Your Career through Awards and Recognitions: A Guide for Women Faculty in the Sciences & Engineering*
- Documentary Videos:**
- *WISELI: ADVANCEing Institutional Transformation*
 - *WISELI: Building on a Legacy*

Principal Investigators

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

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

Jennifer Sheridan, Executive & Research Director, WISELI
Email: sheridan@engr.wisc.edu
Phone: (608)263-1445

Evaluation Director

Christine Maidl Pribbenow (cmpribbenow@wisc.edu)

Program Staff

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

Contact Information

Website: <http://wiseli.engr.wisc.edu>
Email: wiseli@engr.wisc.edu
Phone: (608) 263-1445
Fax: (608) 265-5290

Mailing Address: WISELI
2640 Engineering Hall
1415 Engineering Drive
Madison, WI 53706

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