The goal of the NSF’s ADVANCE Institutional Transformation program is to improve the participation and advancement of women in academic science & engineering.

UW-Madison received an ADVANCE: IT award in the first round:
- 2002 - 2005
- $3.75 Million
- Non-renewable
Women in Science & Engineering Leadership Institute (WISELI)

- Mount new initiatives that fill gaps in UW-Madison’s environment
- Evaluate impact of both old and new initiatives
- Perform research to understand issues for women faculty
- Develop a visible presence on campus
- Disseminate current best-practices
Major WISELI Research Projects

- *Study of Faculty Worklife at UW-Madison*
  - All-faculty surveys in 2003 and 2006
- Ethnographic study of gender in a laboratory setting
- Discourse analysis of gendered interactions in meetings
- Exit interviews with women STEM faculty who left UW-Madison
- Analysis of pools and recipients of major campus awards
Major WISELI Programs

- **Searching for Excellence & Diversity**
  - Workshops for chairs of hiring committees at UW-Madison
    - *Implementing Training for Search Committees* workshop for other campuses

- **Enhancing Department Climate: A Chair’s Role**

- **Vilas Life Cycle Professorship Program**

- **Celebrating Women in Science & Engineering Grant Program**
Searching for Excellence & Diversity

- Active learning/peer teaching
- 5 Essential Elements of a Successful Search
- 1-session, 2-session models, or meeting with individual committees or chairs
- College-based or campus-wide
- Include campus leaders and experts in the workshops
  - Workshop introduction by high-level administrator
  - Campus experts from legal, EEOC, community relations, dual career hiring program, etc.
Element 3: Raise Awareness of Unconscious Assumptions and their Influence on Evaluation of Candidates

- Wennerås and Wold 1997
- Steinpreis, Anders, and Ritzke 1999
- Trix and Psenka 2003
Assumptions/stereotypes about groups are unconsciously applied to individuals

- Unconscious assumptions and stereotypes allow us to quickly and economically organize and retrieve information.
- The three primary group characteristics of individuals that are stereotyped across a broad range of social contexts are race/ethnicity, sex, and age.
- While these unconscious assumptions may be inaccurate on individual or even group levels, they have profound influence on our actions.
114 applications for prestigious research postdocs to Swedish MRC (52 women)

Reviewers’ scores vs standardized metric from publication record = impact points

Women consistently reviewed lower, especially in “competence”

Women had to be 2.5x as productive as men to get the same score

To even the score, women needed equivalent of 3 extra papers in a prestigious journal like Science or Nature


The graph shows the competence score for men (red squares) and women (blue squares) across different total impact points categories. The competence score increases with higher total impact points for both genders. However, men consistently have a higher competence score compared to women across all impact point categories.
Curriculum vitae sent to 238 academic psychologists (118 male, 120 female)
Randomly assigned male or female name to cv
Academic psychologists gave cv’s with male names attached higher evaluations for
- Teaching
- Research
- Service Experience
More comments on cvs with female name
Evaluators were more likely to hire the male than the female applicant

Steinpres et al., Sex Roles, 1999
312 letters of rec for medical faculty hired at large U.S. medical school

Letters for women vs men:

- Shorter
- 15% vs 6% of minimal assurance
- 10% vs 5% with gender terms (e.g. “intelligent young lady”; “insightful woman”)
- 24% vs 12% doubt raisers
- Stereotypic adjectives: “Compassionate”, “related well…” vs “successful”, “accomplished”
- 34% vs 23% grindstone adjectives
- Fewer standout adjectives (“outstanding” “excellent”)

Trix and Psenka, Discourse & Society, 2003
Semantic realms following possessive (e.g. “her training”; “his research”)
Distinctive semantic realms following possessive
Percent Female, Tenure-Track Faculty Offers
Biological & Physical Sciences

<table>
<thead>
<tr>
<th></th>
<th>Participating Departments 2005</th>
<th>Non-Participating Departments 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22/100</td>
<td>7/27</td>
</tr>
<tr>
<td></td>
<td>21/58</td>
<td>26/72</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003-2005</td>
<td>Purple</td>
<td>Yellow</td>
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</table>
Percent Female, New Tenure-Track Faculty
Biological & Physical Sciences

<table>
<thead>
<tr>
<th></th>
<th>Participating Departments 2005</th>
<th>Non-Participating Departments 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2005</td>
<td>21/84</td>
<td>33/89</td>
</tr>
<tr>
<td>2006</td>
<td>17/49</td>
<td>6/20</td>
</tr>
</tbody>
</table>
New Hires' Satisfaction* With the Hiring Process
Biological & Physical Sciences

* Agree Strongly to the item "I was satisfied with the hiring process overall."
The Climate for Faculty of Color is Good
Biological & Physical Sciences

Participating Departments 2004-05
Non-Participating Departments 2004-05

2003 Survey 2006 Survey
Enhancing Department Climate: A Chair’s Role

- Individuals experience climate in their immediate workplace – the department
- Chairs can significantly influence women’s experiences in their departments
- Chairs’ perspectives of climate differ from those of other faculty, especially women faculty
The climate for women in my department is good

* Significant t-test between women and men faculty at $p < .05$.
† Significant t-test between dept. chairs and all other faculty at $p < .05$. 
Enhancing Department Climate: A Chair’s Role

- 3-Session Workshop
- Active learning/peer teaching
- Small groups (6-8) of department chairs
- Short web-based departmental climate survey implemented between meetings 1 and 2
<table>
<thead>
<tr>
<th>The climate is:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Significantly more positive</td>
<td>2 (11%)</td>
</tr>
<tr>
<td>Somewhat more positive</td>
<td>12 (63%)</td>
</tr>
<tr>
<td>The same as it was before</td>
<td>5 (26%)</td>
</tr>
<tr>
<td>Somewhat more negative</td>
<td>0</td>
</tr>
<tr>
<td>Significantly more negative</td>
<td>0</td>
</tr>
</tbody>
</table>
## Evidence from Participating Departments

<table>
<thead>
<tr>
<th>Departments Resurveyed</th>
<th>Mean 1&lt;sup&gt;st&lt;/sup&gt; Survey</th>
<th>N</th>
<th>Mean 2&lt;sup&gt;nd&lt;/sup&gt; Survey</th>
<th>N</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department A</td>
<td>3.21</td>
<td>24</td>
<td>3.71</td>
<td>56</td>
<td>0.5</td>
</tr>
<tr>
<td>Department B</td>
<td>3.07</td>
<td>15</td>
<td>3.29</td>
<td>17</td>
<td>0.22</td>
</tr>
<tr>
<td>Department C</td>
<td>3.82</td>
<td>60</td>
<td>4.25</td>
<td>53</td>
<td>0.43</td>
</tr>
<tr>
<td>Department D</td>
<td>3.79</td>
<td>124</td>
<td>3.63</td>
<td>86</td>
<td>-0.16</td>
</tr>
<tr>
<td>Overall Mean Score</td>
<td>3.47</td>
<td></td>
<td>3.72</td>
<td></td>
<td>0.25</td>
</tr>
</tbody>
</table>
Evidence from Participating Departments

Percent Agree: The Climate for Women In My Department is Good

* Biological and Physical Science Departments Only
Vilas Life Cycle Professorship Program

- Provide grants to faculty whose research program is impacted by life events
- $310,000 annually (funded by the Estate of William F. Vilas)
Reasons for Grant: Awardees

- Own Health: 32.1%
- Parent Health: 7.1%
- Spouse/Partner Health: 10.7%
- Children: 3.6%
- Childbirth Complications: 7.1%
- Child Health: 14.3%
- Multiple Reasons: 25.0%
Celebrating Women in Science & Engineering Grant Program

- Provides funds to departments, centers, or student groups wishing to enhance their own seminar schedules or especially to create new workshops, symposia, lecture series, or similar events
- $10,000/year
- Since 2002, we have awarded 34 grants, and have brought in 66 women speakers to 24 departments/programs in five schools/colleges
- Major program evaluation scheduled for 2009