# UWADVANCE 

University of Washington Center for Institutional Change

October 2001-September 2006 www.engr.washington.edu/advance


College of Engineering


## NSF ADVANCE Goal

- Increase the participation of women in the science, engineering, and mathematics (SEM) workforce through the increased representation and advancement of women in academic SEM careers


## UW ADVANCE Objectives

- Conduct research on issues important to UW women faculty in science, engineering, and mathematics (SEM)
- Undertake institutional transformation to enhance the environment for women faculty in SEM
- Support participation by and advancement of women in SEM


## UW ADVANCE Objectives (cont.)

- Increase the numbers of women in leadership positions in SEM
- Focus on the diversity among women in SEM and design programs with this diversity in mind


## University of Washington ADVANCE Departments

All College of Engineering departments:

- Aeronautics \& Astronautics
- Bioengineering
- Chemical Engineering
- Civil \& Environmental Engineering
- Computer Science \& Engineering
- Electrical Engineering
- Industrial Engineering
- Materials Science \& Engineering
- Mechanical Engineering
- Technical Communication
- Nine College of Arts and Sciences departments:
- Applied Mathematics
- Astronomy
- Atmospheric Sciences
- Biology
- Chemistry
- Earth and Space Sciences
- Mathematics
- Physics
- Statistics


## Center for Institutional Change (CIC)

- Leadership development for current chairs
- SEM department cultural change
- Policy transformation
- Mentoring women in SEM for leadership
- Transitional Support Program for SEM faculty
- Visiting Scholars Program


## Leadership development for current chairs and deans in SEM

- Build understanding and ownership for advancement of women in SEM among current and emerging UW leaders
- Educate SEM department chairs, associate chairs, and faculty leaders about issues affecting women
- Develop accountability networks for institutional change to ensure advancement of women in SEM



## Leadership Development

 Implementation- Assistance with faculty searches

- Quarterly half-day leadership development workshop for deans, department chairs, and emerging leaders
- Chair-led case studies
- Build leadership pipeline
- Sample Topics: Dual career hires, family leave and tenure track extensions, transitioning from associate to full professor, student ratings of SEM women, building consensus, faculty job offers


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## Best Practices for Leadership Workshops

- Quarterly versus Annual workshops
- 3 hour block, 3 times a year
- Optional lunch
- Content
- Case studies led by chairs and faculty
- Topics which chairs deal with on a regular basis
- Invite emerging leaders
- Mentoring-for-leadership lunches for women faculty


## Department Cultural Change

Build collegial relationships within each dept that foster the productivity of its faculty, staff, and students
Foster departmental ownership for cultural change
Capitalize on insights from leadership development program to support cultural change efforts

## Departmental Cultural

Change Implementation

- Department

Transformation Grant


- Create opportunities for women and minorities
- Departmental cultural change - assessment and solutions
- Faculty Recruitment Toolkit
- Faculty Retention Toolkit
- Cross-Department Cultural Change Program


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## Best Practices for Cultural Change

- Skills development
- Practical application
- Addressing people issues
- LIFT UW
- CDCCP
- Women Faculty Seminars

- Frequent opportunity to revisit skills
- Creating buy-in through personal one-on-one conversations with someone who understands cultural change and academia (Visiting Scholar Chris Loving)


## Policy transformation

- Conduct research on barriers to women in SEM related to policy
- Review current policies
- Work through institutional governance channels to revise current policies and develop new ones that will help advance women faculty members in SEM


## Policy Transformation

## Implementation

- Alfred P. Sloan Foundation grant to study part-time tenure track faculty careers
- Bonus: Tenure extensions info.
- Only 3 extensions occurred in ADVANCE depts.
- Data obtained from Provost tenure clock recalculation letters sent to faculty from Jan 00 to July 03

- Earliest event for which recalculation requested occurred in 1996
- Recommendations for facilitating dual career hires
- Investigating family leave policy

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## Mentoring women in SEM for leadership

- Mentoring program for women graduate students to encourage them to pursue academic careers
- Mentoring program to encourage and prepare women faculty to pursue positions of academic leadership
- Mentoring program for junior women faculty
- Create opportunities for networking and information sharing



## Mentoring Implementation

- Mentoring-for-leadership lunch series
- Quarterly workshops for assistant professors

- Professional development consultants
- Faculty-graduate student mentoring program
- Monthly informal lunch gathering for women faculty in SEM

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## Transitional Support Program (TSP) for SEM faculty

- Support outstanding faculty in SEM while they undergo major transitions in their personal lives
- Maintain continuity in SEM departments for faculty in transition and their colleagues


## TSP Implementation

- 25 grants to faculty in 16 of 19 ADVANCE depts. for professional and personal transitions
- Average grant size: \$20,000
- Funds used for
- Release time
- Student support
- Research personnel
- Sample grant outcomes: NSF ITR grant, NSF Center, promotion to full professor, tenure, grant proposals, publications


## Visiting Scholars Program

- Bring SEM scholars to UW
- TYPE 1 - Support scholars dedicated to CIC work for up to 1 quarter at a time
- TYPE 2 - Support visitors, for up to one week, in a department to give a series of talks and meet with faculty, students, and ADVANCE team.
(Scholars may be in SEM disciplines or in fields that study SEM workforce issues)


## Institutionalization of ADVANCE

## activities and initiatives

- TSP to be made available campus-wide
- Leadership workshop model incorporated into T\&D Strategic Leadership Program for faculty
- Faculty Recruitment Toolkit on central site
- Sharing information with Board of Deans
- Ongoing conversations with other groups on campus


## What one thing absolutely has to be part of our program?

- Having a steady drumbeat of activities
- Regular workshops

■ Leadership workshops for chairs and emerging leaders

- Mentoring and networking lunches
- Increases visibility
- Increases networking
- Catalyzes cultural change
- Targeted content at workshops, especially the leadership workshops


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## What would we do differently?

- Staffing
- Getting the right staff at the beginning

■ Diversity among women

- Diversity on leadership team
- Address this topic earlier


## Total Number of Women Faculty

## Total Numbers of Women Faculty in UW

ADVANCE Departments


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## Faculty Distribution

UW ADVANCE Ladder Faculty Distribution
(AY 2002-2003)


## What did not work as we had expected and do we know why?

- Getting senior women faculty involved
- Fewer than expected willing to take even a paid role (they are so busy)
- Can't buy people's time
- Visiting Scholars Program
- Reasons for visits
- Duration of visits
- Diversity Among Women


## UW ADVANCE

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## Resources

- Mini PI meeting presentations
(www.engr.washington.edu/advance/resources/mini_PI)
- UW Faculty Recruitment Toolkit (www.washington.edu/admin/eoo/forms/ftk 01.html)
- UW Faculty Retention Toolkit (www.engr.washington.edu/advance/resources/Retention)
- GATech National ADVANCE conference April 20-21, 2004 - forthcoming best practices document
- AAAS Symposium - forthcoming summary of ADVANCE schools presentations
- UW WEPAN papers - TSP program, Leadership Workshops, and Part-time faculty

