

A Warmer Climate for Women in Engineering

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Outline of Talk

- Background information about URI
- < 2000: Chilly Climate for women in Engg
- > 2000: The Thaw
 - Increased Administrative support for women in STEM resulting from Faculty Union Grievance
 - Award NSF ADVANCE Grant (2003-08)

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Background on U. of Rhode Island

- Medium sized University
 - 600 faculty
 - 12,000 undergrads;
 - * Public Research, LandSea/Urban Grant
- Engineering is 1 of 6 URI "Colleges"
 - 8 engineering BS programs
 - 60 - 70 faculty
 - 850 - 950 undergraduates
- Heavily Unionized University & State
 - active AAUP (Amer. Assoc. of University Professors)
- Small State – all politics are local

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Revolving Door – Female Engineering Faculty at URI

Years	#	# Tenured	# Hired	# Left URI
< 1984	0-1	0	2	1
1984-1992	1-2	1	2	1
1992-2000	2-3	2	3	3

4%
?????

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What changed at URI?

- 1998: URI AAUP filed sexual harassment grievance against Dean of Engineering
 - Initiated by Sociology Professor after he witnessed the exit interview of female engineering professor
 - 18 month arduous, acrimonious process
 - Increased public support for 3 women Engg faculty helped bring grievance to resolution
 - 20 faculty met with President and Provost
 - 130 URI faculty signed Petition supporting female Engg faculty
 - Newspaper Publicity (small state)
 - Better understanding of what constitutes Sexual Harassment
 - Coercive vs. hostile environment
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Gender Differences - Female Engineering faculty received

LESS	MORE
• Lab/office space <ul style="list-style-type: none"> – Size, location, quality – time to renovate/repair 	• Committee work
• Professional respect <ul style="list-style-type: none"> – Men → "Dr. Smith" – Women → "Suzie" 	<ul style="list-style-type: none"> • Student advising or outreach activities • Unwelcome comments / reprimands <ul style="list-style-type: none"> – appearance or apparel
• Informal access to chairs and networks of support & information <ul style="list-style-type: none"> – e.g. advance notice of grant opportunities etc. 	<ul style="list-style-type: none"> • Unwanted pornography in classroom/labs • Denigrating rumors or attacks <ul style="list-style-type: none"> – job credentials – personal life • etc.

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URI & AAUP Resolution in 2000

- URI President acknowledged
 - A hostile environment existed for women in engineering
 - Professional careers of Women faculty were adversely affected.
 - Dean of Engineering had allowed hostile climate to persist unchallenged; he should apologize to women.
 - URI Administration agreed to several corrective, pro-active recruitment and retention measures
 - AAUP & female Engg faculty dropped the grievance
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Pro-active steps taken since 2000

- Strong, public advocacy from President and Provost Offices in support of women in STEM fields
 - New Engineering Administration
 - Revived Engineering Diversity Committee
 - Increased efforts and financial support
 - Increased representation from *outside* of Engg.
 - Support for an NSF ADVANCE proposal
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2003 URI awarded NSF ADVANCE Grant

- 5 years, \$3.5 M
 - Recruitment: Faculty Fellows
 - Faculty Development
 - Work-Life
 - Climate
 - Evaluation/Assessment

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ADVANCE Recruitment – Faculty Fellows program ([Win-Win](#))

- **ADVANCE benefits** from increase in # female faculty in STEM fields
- **URI saves money** - Grant money provides part of salary and start-up packages for new faculty
- **Administration & department maintain control** over Fellow hiring decisions.
 - Provost and Deans determined which STEM department would receive Fellow; also, salary & start-up
 - Department selected research area, search committee, and candidate to hire
- **Fellows receive extensive incentives & support** network

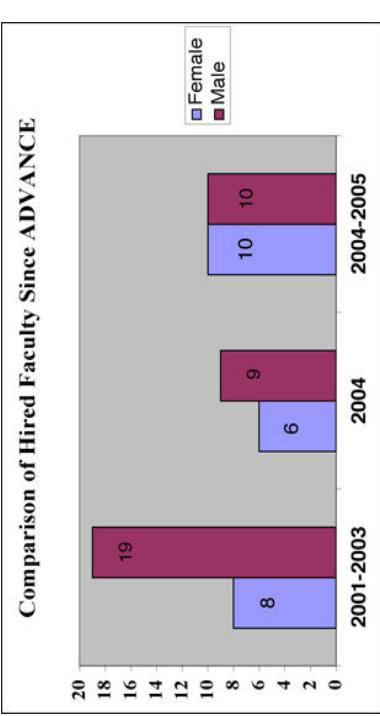
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STEM Departments hiring Fellow

- Competed to “pre-book” faculty line
 - First 2 Fellows hired in Engineering
 - Large, Outstanding applicant pool convinced skeptics in several depts.
- Participated in ADVANCE workshops
 - Department Strategic Planning workshop
 - Climate Workshop
 - Best Practices for Recruitment and Searches
 - Mentoring
- Included ADVANCE representative on search committee
- Scheduled each Fellow candidate to have lunch meeting with ADVANCE during on-campus interview

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Faculty Fellows program very successful



*Advance: 2 Engineering + 1 Physics + 1 GSO + 1 CELS
Colleges:
+ 1 Psych + 3 GSO + 1 CELS

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Stopped Revolving Door – Female Engineering Faculty at URI

Years	#	# Tenured	# Hired	# Left URI
< 1984	0-1	0	2	1
1984-1992	1-2	1	2	1
1992-2000	2-3	2	3	3
2000-2006	8	4	6	0

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– ADVANCE Faculty Development Workshops and support network

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10 Faculty Fellows: Incentives

- Prestige of affiliation with NSF
 - Reputation ADVANCE program
- Minimal teaching loads and no service for first 1-2 years to get head start on research
- Assurances that Fellow position
 - will transition to tenure-track when faculty line opens
 - counts towards tenure clock, at Fellow's discretion
- Opportunity to talk confidentially with women scientists during interview about climate, maternity leave policy, dual career issues, etc. (*bias avoidance*) & negotiating start-up packages.
- ADVANCE Faculty Development Workshops and support network

ADVANCE Faculty Development – Retention Activities

- Workshops
 - Mentoring, Grant Development, How to Negotiate, Writing ...
- Monthly Topical Luncheons
 - Thinking about tenure from the start
 - Gender-sensitive teaching
 - Dual Career Issues
 - Work-work and home-work
 - Visiting Speakers (Valian – “Why so Slow”, Drago “Bias Avoidance”)
 - Didn’t I just say that? How to be heard
 - ...

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ADVANCE Faculty Development – Retention Activities

- \$20-40k/yr Incentive Grants
 - to promote women in STEM fields
 - 24 grants (given to men & women)
- ADVANCE Office
 - resource for information and confidential advice
- Social Activities after work to reduce sense of isolation
 - book club, pot luck dinners, subsidized tickets to plays, concerts, ...

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Assessment and Evaluation

- 2003 Campus wide climate survey conducted (39% response rate); to be repeated in 2007.
- Most Important factors for Career Satisfaction
 - Work Respect, Influence at Work, Positive Work Climate, Resources, Work-Family Balance
 - Men Report More Positive Work Environment:
 - More Career Satisfaction, More Influence Over Careers, Less Discrimination
 - Women Report More Interpersonal-Work Challenges:
 - Less Interpersonal Support & Respect, Less Likely to Decide to Have Children, More Consideration of Partner's Job Opportunities, More Belief in Combining Career & Parenting

Work-Life

- Parental Leave Policy for birth or adoption developed & passed providing 6 weeks paid leave and optional 1 year delay of tenure clock
 - Campus Involvement & Support
 - 11 participants (including several men)
 - Focus on inclusiveness, can benefit men & women

Dual Career Guidelines Being Developed

- Administrative Encouragement
- Still have Union concerns and procedures to overcome

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Climate

Departmental Climate Workshops offered by ADVANCE

- Help STEM departments identify strengths, set strategic goals, and improve departmental dynamics
- Set positive, pro-active goals
 - Improve Inclusiveness and Openness
 - “Rising Tide lifts all boats”
 - benefit all

(~ 3 legged table)

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Work Climate

Workshops and Best Practices integrated with theoretical models of organizational change

- Appreciative Inquiry:
 - emphasis on how all faculty can benefit from analysis of what contributes to an excellent work environment
- Trans Theoretical Model:
 - system of matching change strategies to defined levels of readiness for change
- Institutional, Interactional, Individual: (~ 3 legged table)
 - Administrative policy, Top-Down
 - department practices and culture
 - Grass roots, Bottom-Up

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Conclusions (www.uri.edu/advance)

- NSF ADVANCE has improved recruitment, retention and climate for female faculty in STEM fields at URI
- Many Benefits of having a Multi-disciplinary team
 - Engineering, Physical Sciences, Social Sciences, Administrators
 - Social Theory on change very helpful
- Work being done to sustain change beyond grant
 - Institutionalized within existing campus committees/groups
- Many activities can be done at low cost
 - Ask Senior Faculty to lead workshops or Topical lunches
 - Seek ways to publicize existing Work-Life Balance initiatives
 - Knowledge is power for new faculty in negotiations with chair
 - Organize low cost social events to reduce sense of isolation

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