# Strategies for Career Success of Women Science Faculty: The ADVANCE Program at the University of Rhode Island 

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## ADVANCE Institutional Transformation Program at the University of Rhode Island

- 5-yr NSF award (2003-2008)
- Goals
- To increase the recruitment and retention of women faculty in science, technology, engineering, and math (STEM) disciplines
- To improve the work environment for all faculty
- To contribute to the national goal of creating a broad-based scientific workforce


## At the start of the program...

STEM Faculty by Gender and Rank (2004-2005)


Women earned about $50 \%$ of PhDs
But, only $14 \%$ of STEM faculty were women
In Oceanography, only 4 of 36 faculty ( $11 \%$ ) were women

## Advance <br> University of Rhode Island

- Evaluation and assessment of the status of women STEM faculty
- Faculty recruitment
- Faculty career development
- Changes in university policies
- Work climate change and sustainability


## Evaluation and Assessment Survey

- University-wide survey
- Designed and analyzed by team of psychologists, sociologists, and outside consultants (expertise in survey methodology, statistics, gender issues, and organizational change)
- Distributed to ~700 faculty, all departments (40\% return)
- Survey measurement categories
- Background (gender, rank, tenure, start-up)
- Interpersonal (support, attitudes, balance, children, partners)
- Work Environment (satisfaction, leadership, discrimination, equity)
- Resources / Contributions (equipment, recognition, productivity)
- Readiness for Change


## Some 2004 Survey Highlights: Status of Women STEM Faculty at URI

Women vs. Men

| Resource allocation, productivity, recognition | W = M |
| :---: | :---: |
| Interpersonal support from colleagues | W < M |
| Discrimination in department | W > M |
| Consider not having children | W $>$ M |
| Consider leaving job for partner's job | W $>$ M |
| Support concept of women's success at both career and family | W > M |
| Support concept of differentiated gender roles (man earns income, woman nurtures family | W < M |
| Career satisfaction | W<M |

Oceanography was similar to other STEM departments in these variables.

## Faculty Recruitment: <br> ADVANCE Fellow / Assistant Research Professor

- Unique prestigious position with faculty status
- New hire spends first 2-3 years developing research
- Reduced teaching and service
- Salary and (partial) startup costs paid by ADVANCE
- At end, Fellow transitions seamlessly to regular statesupported tenure-track slot
- In 2 years, 10 new women STEM faculty were hired with full or partial ADVANCE support.


## Strategies for Success

- BIG financial incentive and open positions created competition among departments for Fellows
- Prestigious position and NSF funding attracted outstanding applicants
- Strong top administrative support was critical


## Faculty Recruitment in Oceanography: Search Process

- Initial plan: 1 ADVANCE Fellow, subject area open
- Faculty-style search committee
- Members from each disciplinary group
- ADVANCE member from another department, no conflict of interest
- ADVANCE provided best practices search advice, interview funding, and point of contact for applicants to speak confidentially on work-life flexibility and startup strategies.
- Competition among different oceanographic disciplines (after some initial reluctance)
- > 50 applicants, 9 interviewees,
- Focus on scientific credentials, not gender


## Faculty Recruitment in Oceanography: 5 New Women Faculty!

- 4 women faculty hired in Oceanography (1 in each discipline) from ADVANCE search
- 1 woman oceanographer hired in Cell and Molecular Biology from another ADVANCE search (joint appointment with Oceanography)
- Excellent start-up packages: resources leveraged from ADVANCE, Deans, and University
- Dual career issues dealt with positively
- High quality lab and office space provided
- Critical mass of junior women faculty in Oceanography
- Close-knit cohort at the same stage of career and personal life

Dr. Rebecca Robinson Chemical Oceanography

Dr. Bethany Jenkins
Molecular Biology


New faculty members have arrived...
Present focus of ADVANCE:

- Career development and retention
- Training, networking, small grants
- ADVANCE-facilitated interfacing between new faculty and Chairs / Deans
- Long-term improvement in work climate
- Faculty productivity and retention increase if a university
- values inclusion
- provides leadership and skills training
- ensures flexibility in balancing work-life situations
- There is a real financial cost when a faculty member leaves


## Mentoring Workshops

- Mentors (experienced faculty) and "mentees" (new faculty)
- Women and men, initially from STEM disciplines
- Presentations, panels, small group discussions, case studies
- Brochures with best practices suggestions
- Emphasis by top administrators of importance of mentoring
- Mentoring is a normal and beneficial tool for career development at all levels (not "remedial")
- Mentors now provided for all new faculty: one from within the department, one from outside
- Good mentoring should be rewarded
- New language for promotion and tenure guidelines


## Career Development Workshops

- Grant Writing (with URI Research Office)
- Securing Funding
- Collaborative Proposals
- Negotiation Skills
- Effective Teaching (with Instructional Development Program)
- Post-Awards Grant Management
- Monthly Writing Workshops



## ADVANCE Incentive Fund

- Annual \$40,000 competitive award program
- Jointly funded by ADVANCE and Provost's office
- Small grants for research by STEM women faculty or for activities by anyone that promote ADVANCE goals
- 15 projects supported 2004-2005, next competition underway


## Networking and Social Opportunities: Monthly Topical Lunches

- Casual lunch series for STEM women faculty
- Panelists and group discussion: teaching, research, balancing career and personal life
- Some recent topics

Thinking about tenure from the start
Gender-sensitive teaching
Dual career issues
Work-work and home-work
Didn't I just say that?: How to be heard

## Leadership Training for Chairs

- Organized by Provost, ADVANCE, and John Hazen White Sr. Center for Ethics and Public Service
- Topical lunch discussions
- Promote excellence in leadership
- Develop specific suggestions for promoting retention of new faculty

Pro-active Chairs / Deans provide essential leadership to ensure that new faculty members are welcomed and encouraged, receive the negotiated lab space and startup items in a timely manner, and are treated fairly in departmental assignments and resource allocation.

## Changes in University Policies: Paid Parental Leave

- 6 weeks paid leave for new mothers and fathers
- Developed by collaboration between ADVANCE and President's Commission on the Status of Women
- Incorporated into latest union contract (with support from both faculty and administration)
- So far, 11 faculty members (including several men) have taken advantage of this policy
- There appears to be an increase in the number of women STEM faculty having children before tenure

This is a clear demonstration to the university community that gender equity benefits both men and women.

## Changing the Work Climate: Long-Term Sustainability

- ADVANCE and facilitator-led departmental climate workshops to help STEM departments identify strengths, set strategic goals, and improve departmental dynamics
- 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
- Transtheoretical Model: system of matching change strategies to defined levels of readiness for change

Initial incentive for departmental participation: expectation of a Faculty Fellow

## Dissemination throughout the University and Community

- Public seminars by nationally-known speakers on women in science issues
- ADVANCE presentations at a community business networking forum
- ADVANCE members featured in local public TV program: Amazing Women of Rhode Island
- Publicity in news media
- Consultation with other local and regional institutions and national ADVANCE network
- Professional publications and presentations about ADVANCE
- Scientific publications and talks by ADVANCE Fellows


## Major Achievements of ADVANCE: A Synthesis of Efforts

- New women STEM faculty hired ( $50 \%$ of hires)
- More open responsiveness to work-life balance
- Paid family leave
- Strong mentoring and training programs for all STEM faculty

- Improved work environment for all faculty


## Lessons Learned: Essential Strategies

- Top-down administrative support
- Financial and hiring incentives to jumpstart the process.
- Competition among departments
- University policies, training, and communication that actively support junior faculty and recognize the importance of worklife balance
- "Best practices" in searches, a prestigious appointment, and positive startup negotiations
- Recognition of senior faculty (men and women) who actively promote the success of junior faculty
- Ultimately, the accomplishments and energy of a critical mass of junior women STEM faculty will provide the strong intrinsic rationale for sustaining these efforts.


## www.uri.edu/advance

