



Developing Diverse Departments (3-D) at NC State

NSF ADVANCE @ NC STATE



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NSF ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

- The goal of the ADVANCE program is to develop systemic approaches to increase the representation and advancement of women in academic (STEM) careers, thereby contributing to the development of a more diverse science and engineering workforce

Why do we need diversity in academia?



Doctorate recipients from US universities for 2008 (NSF Data Tables)

- 26,271 males (53.8%)
- 22,496 females (46.1%)
- 35 unknown (0.1%)



CS Doctoral Degrees

	2001	2002	2003	2004	2005	2006	2007
Granted to Women	136	171	168	201	214	307	328
Total	768	750	816	910	1,121	1,416	1,597
	17.7%	22.8%	20.6%	22%	19.1%	21.7%	20.5%

Doctorate holders employed in universities and 4-year colleges (2006)

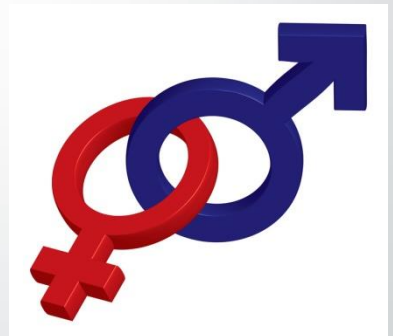
	Full Prof	Assoc Prof	Asst Prof	Other and N/A	Total
Female	6.3%	7.2%	9.3%	9.7%	32.6%
Male	27%	14%	12.4%	14.1%	67.4%
All	33.3%	21.2%	21.7%	23.8%	100%

CS and IS: Doctorate holders employed in universities and 4-year colleges (2006)

	Full Prof	Assoc Prof	Asst Prof	Other	N/A
Female	300	400	500	*	300
Male	2500	1900	1900	*	1300
Total	2800	2300	2400	*	1600
Female (%)	10.7%	17.4%	20.8%		23.1%

Have you ever
experienced
unfair treatment?

...due to your
gender or race?



Research has shown that women in academia

- Experience lower salaries
- Receive less funding from their home institution
- Receive less lab space
- Are physically isolated (office location)
- Are given the “benefit of the doubt” less often than male faculty
- Are often motivated to leave science, math and engineering majors as students, due to “a chilly climate”
 - Women pick up signals, both blatant and subtle, that they are outsiders and do not fit into the male, majority culture of their declared field of study
- Are most often driven away because of psychological isolation – not the inability to do the intellectual work

Women in academia

- Are treated as both super-visible and invisible, depending on the circumstances
- Are expected to fit into the existing culture and assimilate as other new faculty members before them have done
- (and other minorities) are often viewed as “outsiders” leading to extra psychological stresses and the general feeling of not belonging
- Usually receive little or no mentoring
- Usually receive little or no inside information
- Usually receive little or no introductions to valuable connections and networks

And still...

- Well-known studies have shown that an article with a woman's name as author will invariably receive lower reviews than the same article with a man's name
- Women are assumed to be assistant professors or lecturers, while men are assumed to be associate or full professors
- Men are expected to be innately more aggressive and independent. Women are thought to be more emotional, expressive, and nurturing
 - How can this have a negative impact?

Schools with NSF ADVANCE Funding

- 140 Colleges and Universities have somehow been associated with ADVANCE funding

NC State ADVANCE

Shifting the focus of conversation
away from
equal opportunity hires
and toward the effects of
unrecognized societal attitudes
and
social biases in evaluation
within our university community

NC State ADVANCE

- A three-year two-armed project
- Developing change agents among faculty and academic leaders
- Each arm is built around a core group of faculty who will make a commitment to meet as a group for three years to develop a depth of knowledge and commitment that positions them to serve as effective change agents within the university culture

That is what NC State and other universities are doing...

Now what can you do?

As a new junior faculty member?

- Become Informed
 - Faculty handbook
 - The unwritten rules
 - Observe
- Keep careful records of your activities
- Is there anything you should avoid?
- Be familiar with your job description
- Let your career advisors, chair, and colleagues know when you have done good work

Seek advice and mentoring from a variety of places

- Seek advice and mentoring from a variety of places
 - Your own institution
 - Your research area, but at another institution
- Identify allies

Work / Life Balance: Formal policy or informal practice?

- Flexible leave without pay
- Modified duties
- Stopping the tenure clock
- Maternity leave
- On-campus daycare
- Dual career hiring

For additional information



- Faculty Diversity: Problems and Solutions, by JoAnn Moody (2004)
- Why So Slow? The Advancement of Women, by Virginia Valian (1999)
- Tutorials for Change: Gender Schemas and Science Careers, Virginia Valian

<http://www.hunter.cuny.edu/gendertutorial/index.htm>