

NSF Division of Chemistry

Actions and Plans for Broadening Participation Chemistry Division - NSF

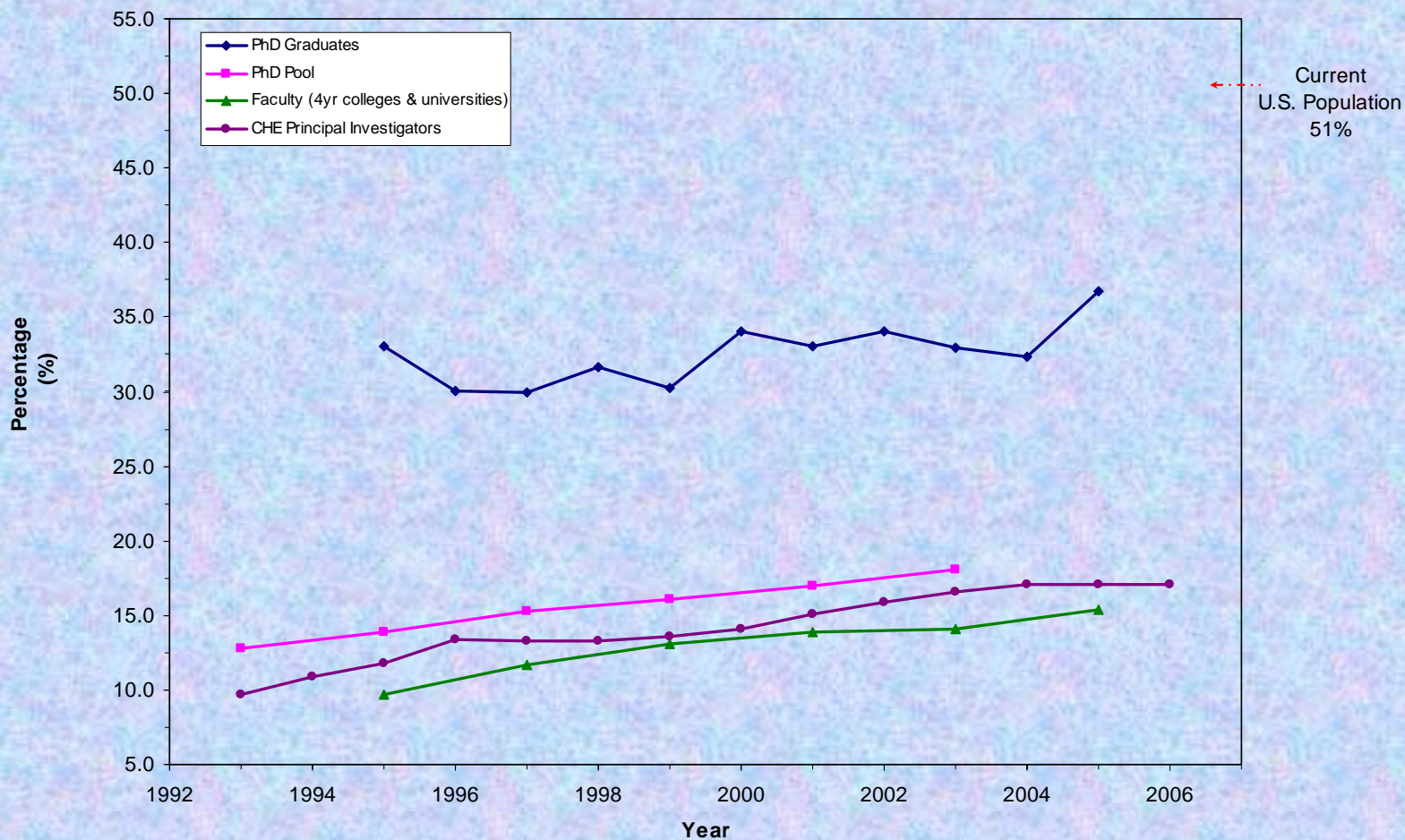
AAAS/AGEP – Feb. 2, 2007

10.16.2006



Status of Ph.D. Women in Chemistry

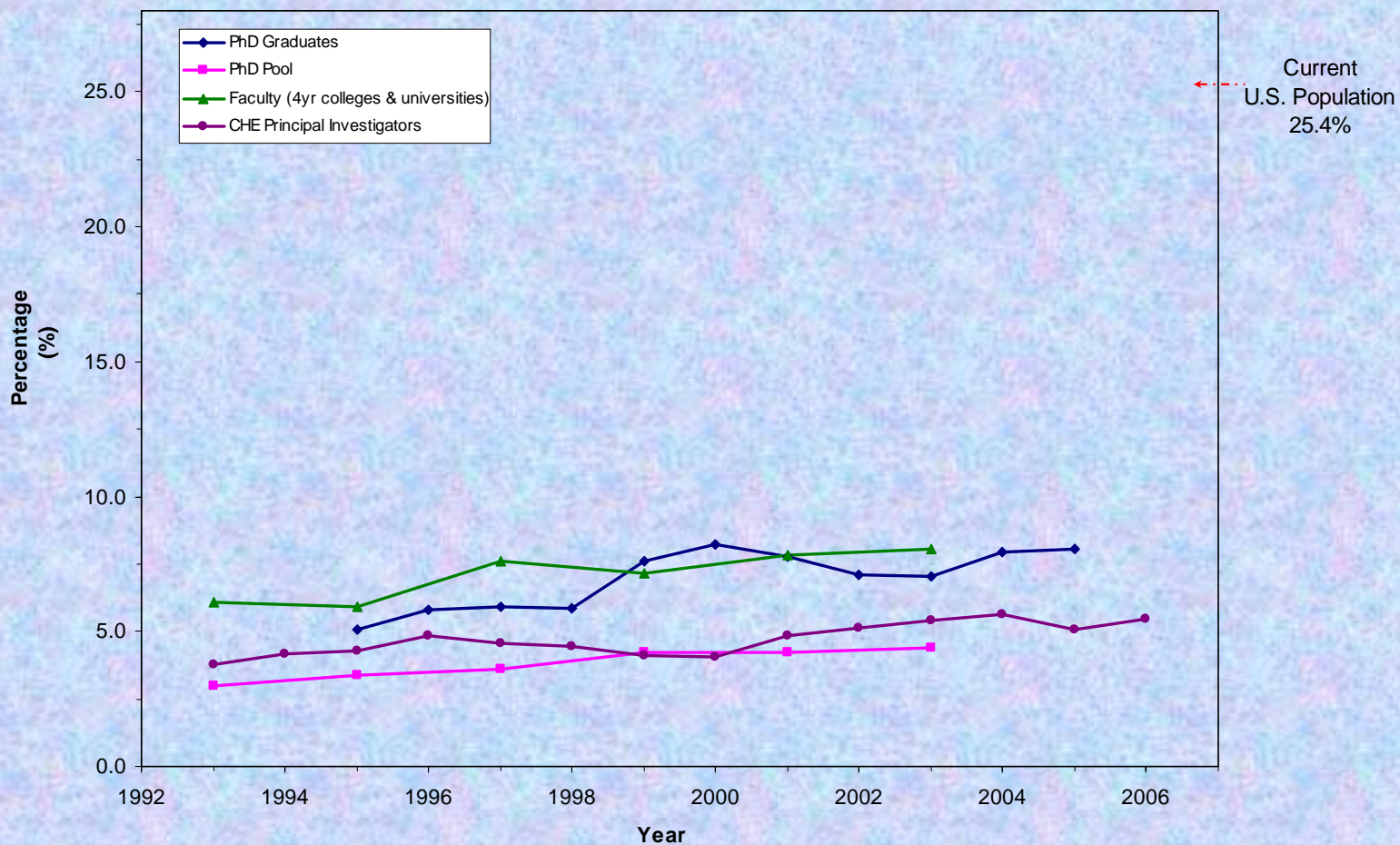
% Females in Chemistry



Status of Ph.D. URM in Chemistry

% Under-Represented Minorities in Chemistry

(African American, Hispanic, Native American including American Indian/Alaskan Native, Native Hawaiian or Pacific Islander)

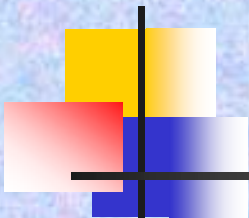




FY05

- April 2005 MPS-AC 1-day session on gender equity
 - pipeline issues differ among MPS disciplines
 - department identified as “unit of change”
- Comprehensive strategy for CHE
 - embed “broadening participation” into CHE business activities
 - ask/require our PIs to do the same

- January 2006 “Gender Equity in Academic Chemistry” Workshop
 - “top 50” -> 55 dept. chairs plus other invitees
 - NSF/NIH/DOE funding & senior mgmt. presence
 - plenaries (incl. Sen. Wyden); data
 - interactive skit; implicit bias; Title IX; agency programs (e.g., ADVANCE)
 - panels/breakouts: depts., institutions, funding agencies

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- January 2006 “Gender Equity in Academic Chemistry” Workshop
 - pre- and post-workshop COACh surveys of chairs
 - **chairs committed to at least 2 action items**
 - July 2006 report with multiple recommendations
 - COACh supplement for “chemchairs” website
 - report on action items (pull-down menu)
 - **80% response rate as of 12/06**
 - *Science* article in preparation on survey results

Interactive Website for Chemistry Department Heads

- Welcome
- How to use this site
- My Department Action Items
- Action Items Report
- Forums
- Change My Info
- Logout

Action Items for Implementation by My Department/Progress/Impact

[Summary of Action Item Categories](#)

Select Category of Action Items to be Implemented

Double the percentage of women applicants in the applicant pool in the next year (AY 05-06 vs. AY 06-07).	Select
Double the percentage of women applicants in the applicant pool in the next year (AY 05-06 vs. AY 06-07).	
Establish effective mechanisms for assisting career development of young faculty, especially women.	
Consider personal obligations in academic scheduling and planning.	
Develop and implement programs that educate all faculty members and students in your department regarding the accumulation of disadvantage of women.	
Make diversity an academic priority and develop programs that enhance recruitment and retention of faculty.	
Develop policies within your institution to facilitate the hiring of women, including facilitating spousal hiring.	
Assure that mid- and senior-level faculty, especially women, are participating in leadership roles.	
Recognize the importance of and advocate for institutional support of child care.	

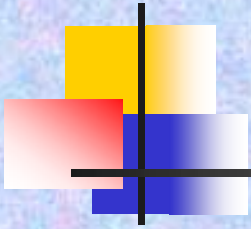
Website developed and maintained by COACH. Funded by the National Science Foundation.

[contact webmaster](#)



FY07 and Beyond

- CHE panel presentation on evaluation bias
- CHE Broadening Participation Plan adopted (unanimously) on Nov. 2006
- Follow-up to Gender Equity Workshop
 - Leadership training for chairs at CCR Meeting in April 2007
- November 2006 MPS-AC ½-day session on URM
- Workshop on URM in chemistry in June 2007



Implicit Bias in Evaluations



NSF, DOE, NIH-sponsored workshop Jan. 2006
*Building Strong Academic Chemistry
Departments through Gender Equity*

A key recommendation to funding agencies is to develop policies to ensure gender equity in proposal review through:

- instituting procedures for training of reviewers and grantees on diversity issues
- modifications of peer review processes where necessary to ensure gender equity



Minimizing Bias in Evaluation

- Implicit bias toward a group ("schemas")
 - Non-conscious hypotheses/stereotypes, often about competence
- Lack of critical mass \Rightarrow greater reliance on schemas
 - Few women and minorities in sciences
- Accumulation of disadvantage
 - Small bias in same direction has large effect over time
 - Very small differences in treatment can have major consequences in salary, promotion and prestige

Valian (1998)



Ways to Mitigate Evaluation Bias

- (1) Increase awareness of how schemas might bias evaluation
- (2) Decrease time pressure and distractions in evaluation process
- (3) Rate on explicit criteria rather than global judgments
- (4) Point to specific evidence supporting judgments

Bauer & Baltes, 2002, *Sex Roles*, 47 (9/10), 465-476

Please incorporate (3) & (4) in your discussions



CHE Broadening Participation Plan

Adopted Unanimously by CHE
Nov. 2006



FY07 Measurable Goals

GROUP	GOAL
Committee of Visitors	U.S. Census
Nominees to MPS-AC	U.S. Census
CHE program officers	Graduating Ph.D. pool in past 3-5 years
Other CHE staff	U.S. Census
CHE ad hoc reviewers	Distribution of all Ph.D. chemists (Strive towards Graduating Ph.D. pool in past 3-5 years)
CHE panelists	Graduating Ph.D. pool in past 3-5 years
Workshop participants	Graduating Ph.D. pool in past 3-5 years



Summary of Strategies and Activities

- Monitor CHE PI demographics, and engage in mentoring and other forms of outreach
- Hold a follow-up meeting to Gender Equity Workshop in FY07
- Sponsor a workshop on Under-Represented Minorities (URM) in FY07 to be modeled after the Gender Equity Workshop
- Plan for workshop on the Disabled in Chemistry for FY08
- Update progress and include diversity goals in annual Division report