

# NSF Division of Chemistry

Actions and Plans for  
Broadening Participation  
Chemistry Division - NSF

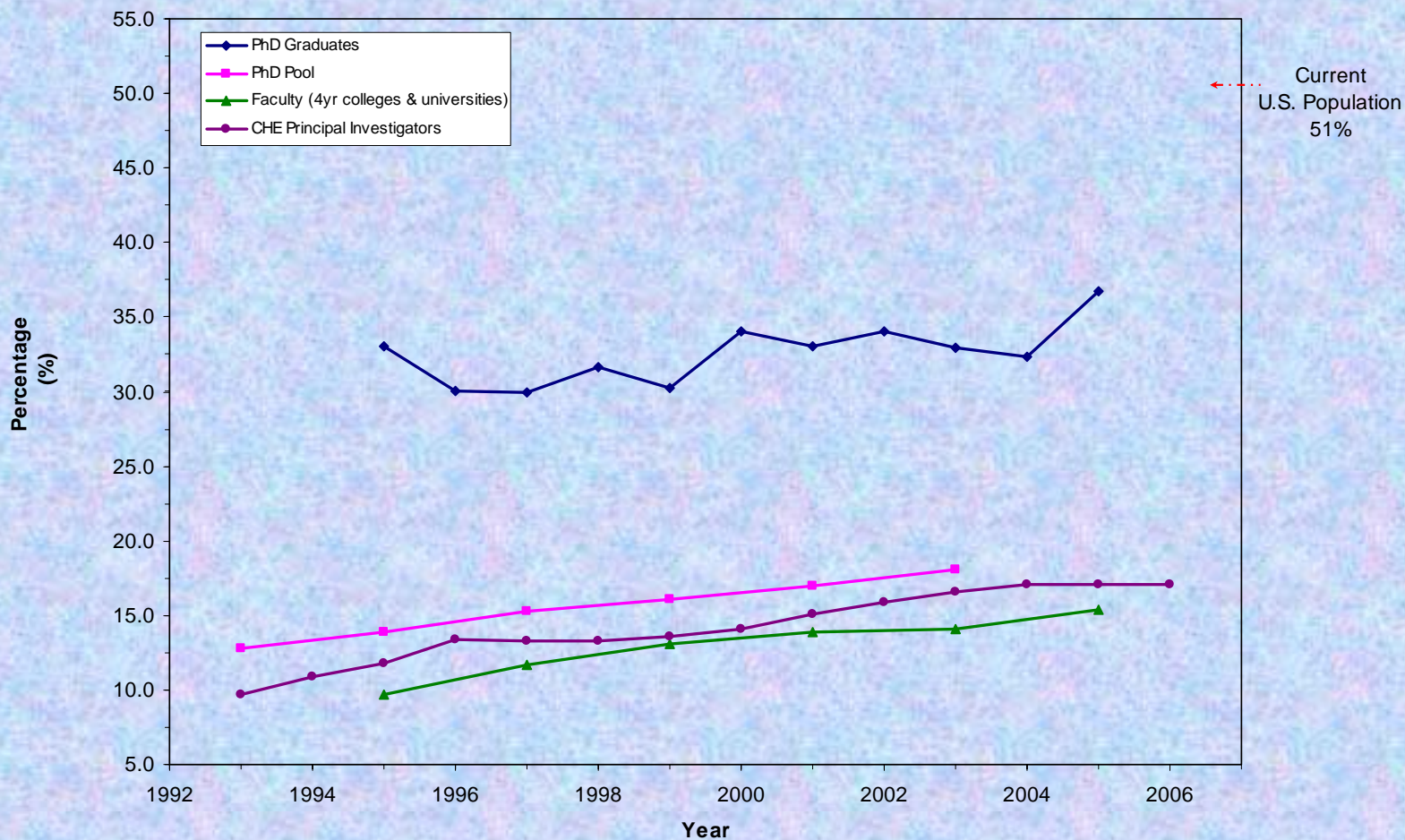
AAAS/AGEP – Feb. 2, 2007

10.16.2006



# Status of Ph.D. Women in Chemistry

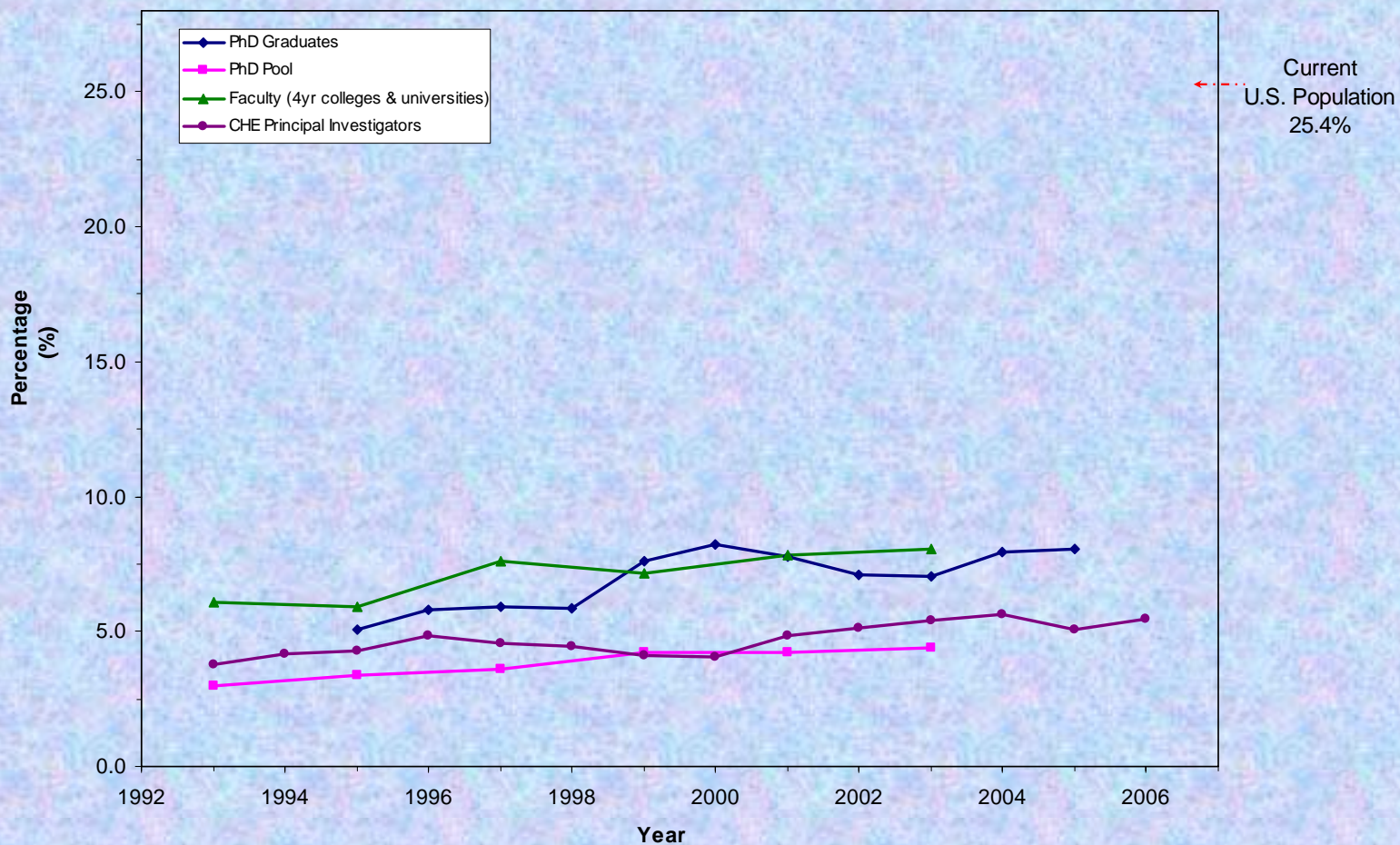
% Females in Chemistry



# 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)



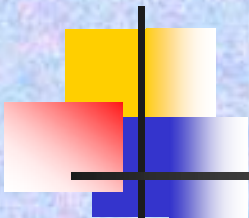


# FY05

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- 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).
- 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.

Select

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

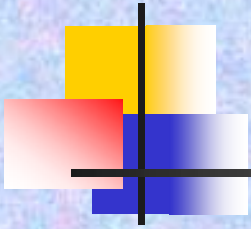
[contact webmaster](#)



# FY07 and Beyond

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- 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

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

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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

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- Implicit bias toward a group (“schemas”)
  - Non-conscious hypotheses/stereotypes, often about competence
- Lack of critical mass ⇔ 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

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- (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

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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

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- 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