



W I S E L I

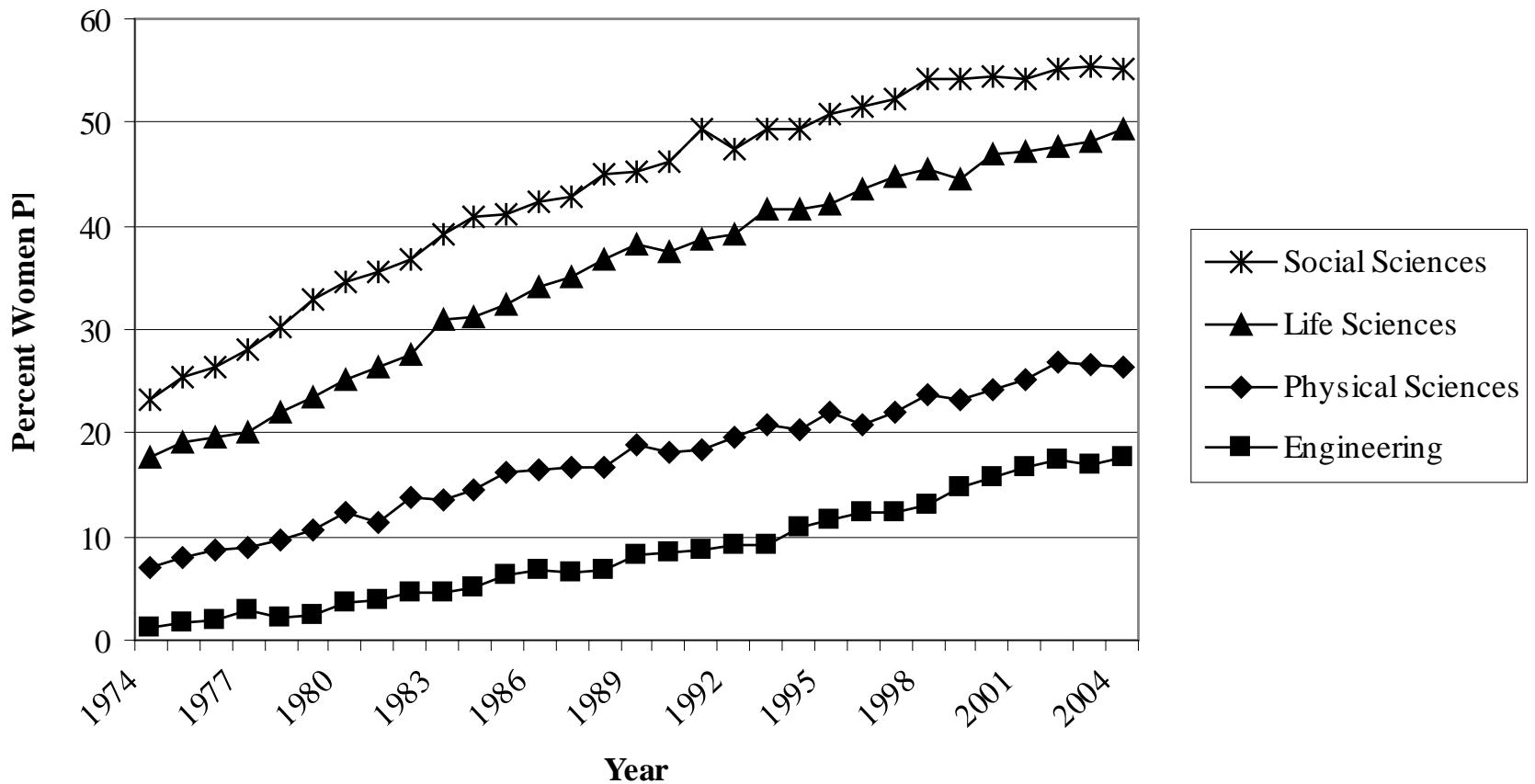
Women in Science & Engineering Leadership Institute
University of Wisconsin-Madison

More Women In Science: *The Institutional Challenge*



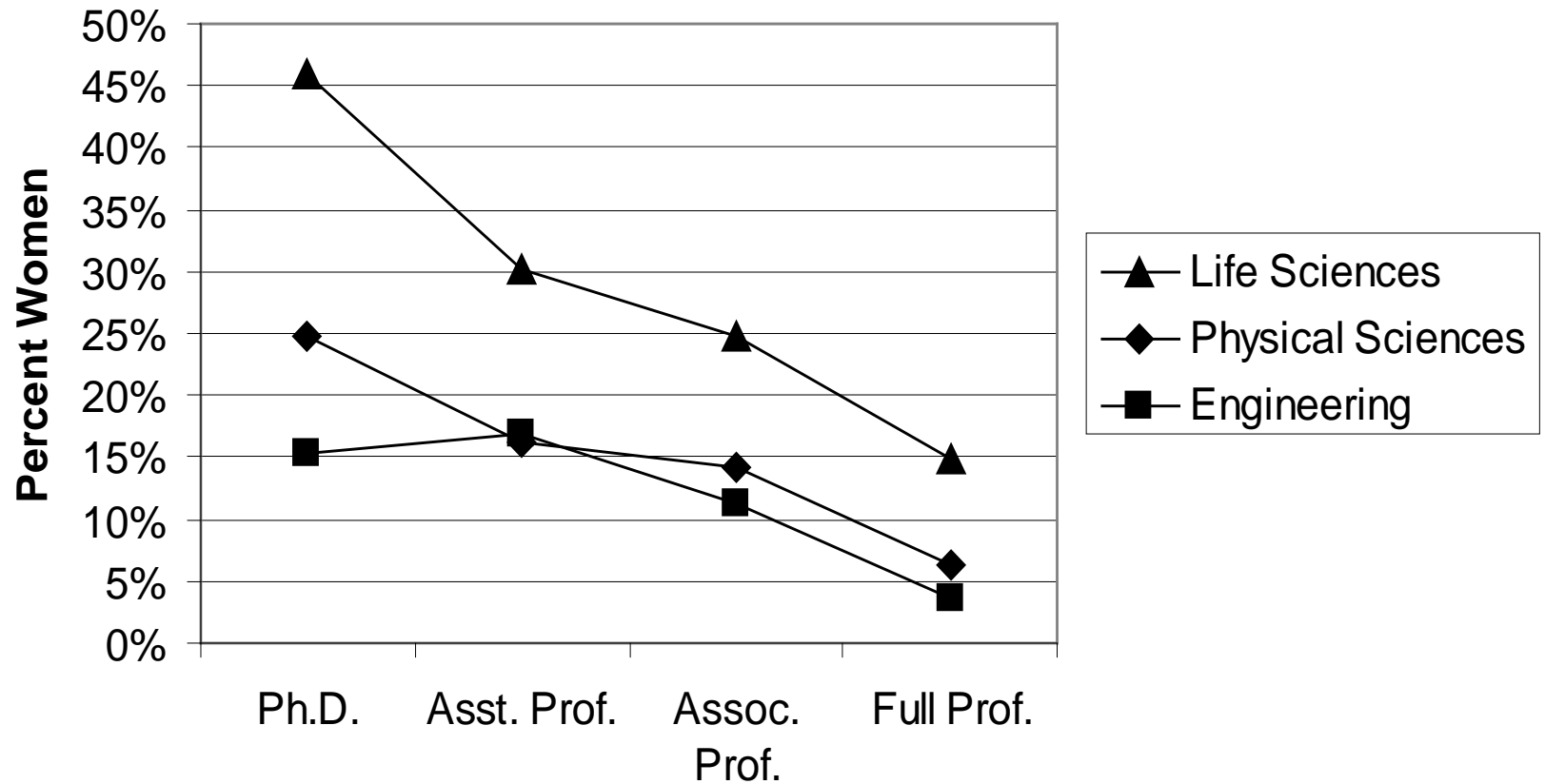


The Problem





The Problem





The Problem



- Women from minority racial and ethnic backgrounds are virtually absent from the nation's leading science and engineering departments



Past Solutions

- Increasing the pipeline
 - Biology? Chemistry?
- Increased funding for women
 - POWRE awards?
- Teach women how to succeed
 - Leadership training
 - Mentoring
- Policy changes
 - Extend tenure clock
 - Dual career hire



New Approach: Institutional Transformation

- Rules that appear neutral may function in a way that leads to differential treatment or produces differential outcomes for men and women
 - Tenure process coincides with family formation years
 - Outside activities (e.g., family obligations) indicate a “lack of seriousness” about career
 - Use of programs designed to increase flexibility?
 - Deviation or delay from “normal” path
 - Salary increases/outside offers
 - Childcare needs (conferences, field study, time in laboratory)

“Academic organizational structures and rules contribute significantly to the underuse of women in academic science and engineering.”



New Approach: Institutional Transformation

- National Science Foundation ADVANCE program
 - 2001 first solicitation
 - Large, prestigious awards
 - Goal is to transform the *institution*, not the women!
 - Take a scientific approach: data, social science research
 - Provide models for other universities



WISELI Programs

- Vilas Life Cycle Professorships
- Searching for Excellence & Diversity
- Enhancing Department Climate: A Chair's Role
- Research & Evaluation



Vilas Life Cycle Professorship Program

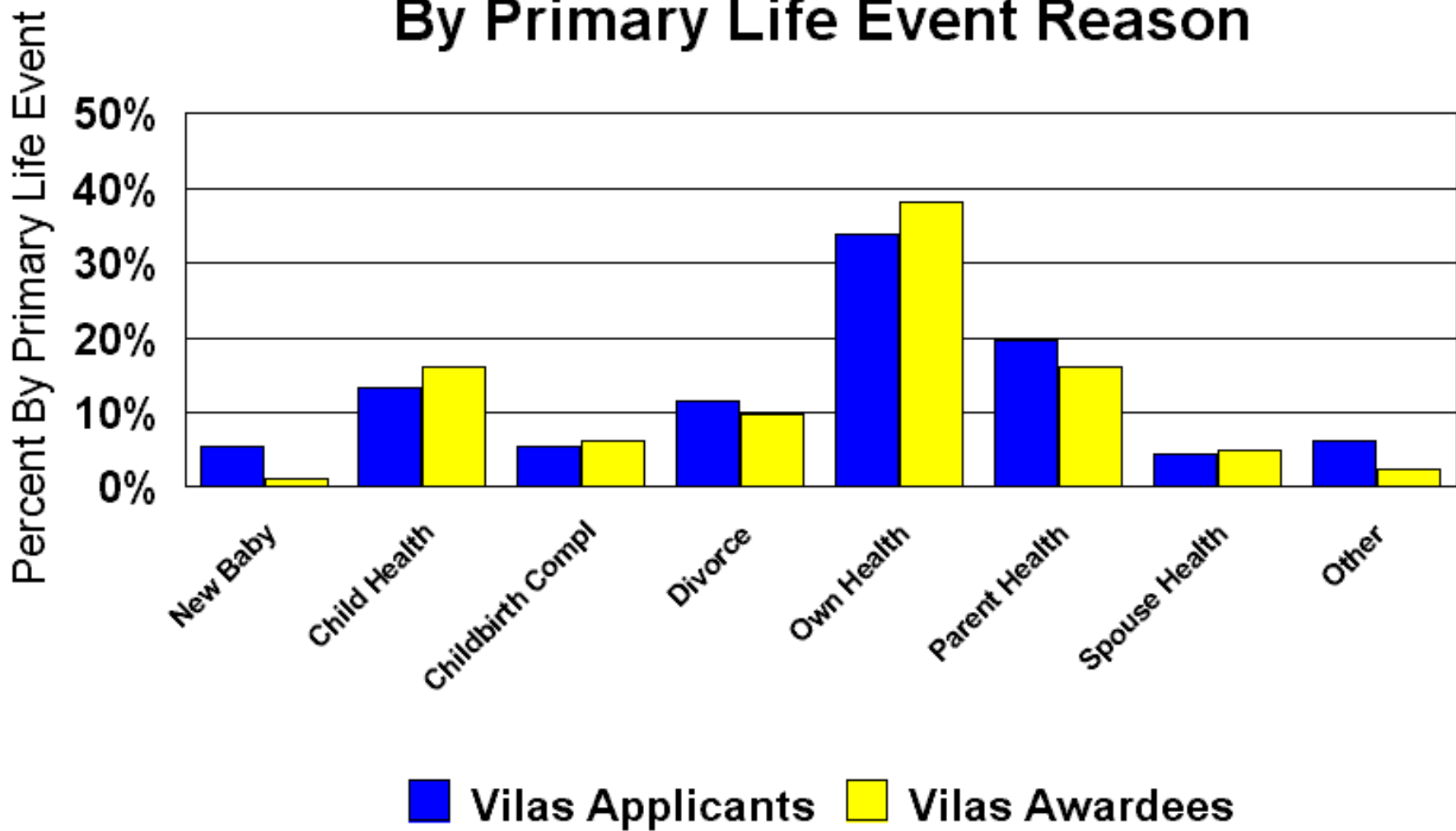
- Recognize that life events outside of one's control happen
 - Both men and women experience such events, but women are more likely to experience them early in the career, when they are more vulnerable
- Reduce turnover by providing research support for faculty in crisis
- Understand what events are problematic and which career junctures are most critical
- Understand what faculty need when they are in crisis



Vilas Life Cycle Professorship Program

- Funded by the Vilas Trust since 2005
- Three rounds per year
- Approximately 21 applications per year
 - Fund approximately 14 faculty per year
- \$372,000 per year distributed
- *Program in flux due to economy!*

Percentage of Vilas LCP Applicants & Awardees By Primary Life Event Reason





Life Cycle Grant evaluation

“This program generates a feeling of commitment to this institution, and a desire and willingness to give back, to help ensure that others benefit from similar institutional support in the future. . . I have mentioned it to job candidates as an illustration of how this institution takes seriously life cycle issues and is genuinely humane and supportive.”



Searching for Excellence & Diversity

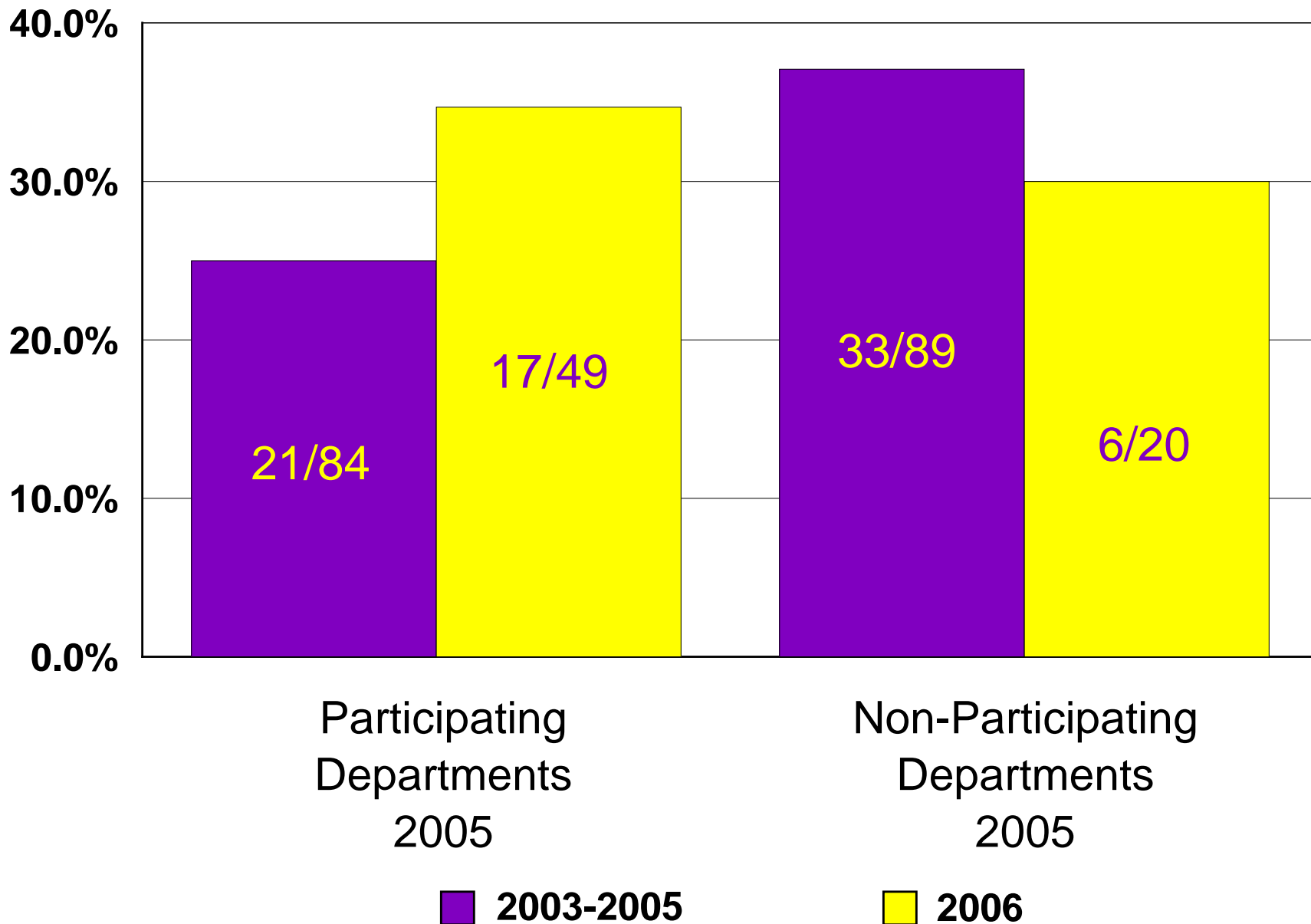
- **Five Essential Elements of a Successful Search**
 - Run an effective and efficient search committee
 - Actively recruit an excellent and diverse pool of candidates
 - Raise awareness of unconscious assumptions and their influence on evaluation of candidates
 - Ensure a fair and thorough review of candidates
 - Develop and implement an effective interview process



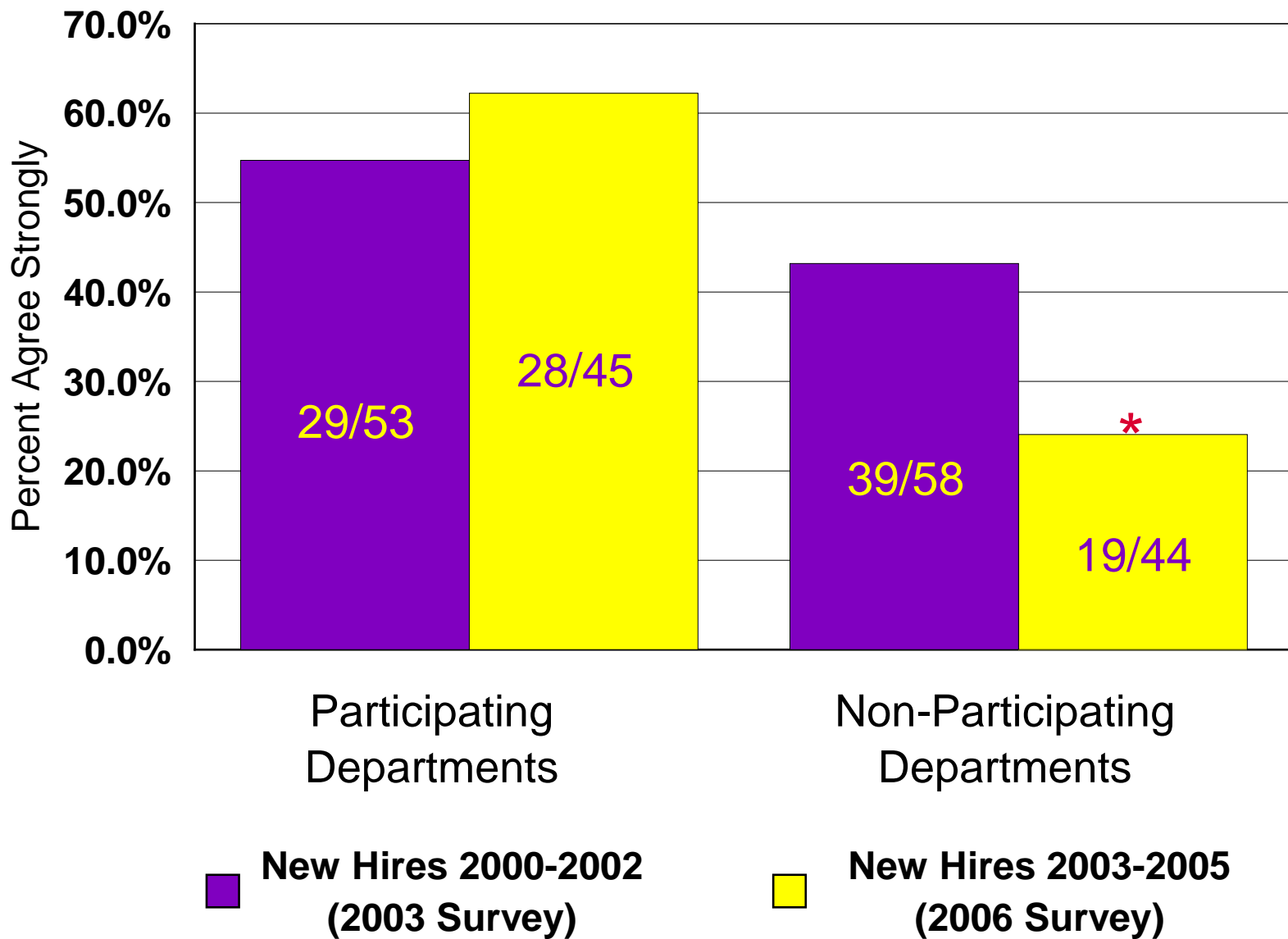
Searching for Excellence & Diversity

- Run approximately 10 workshops per year
 - Most workshops are 2 sessions
- Approximately 90 faculty per year participate
- Multiple formats used
- Materials available to other universities at cost

Percent Female, New Tenure-Track Faculty Biological & Physical Sciences

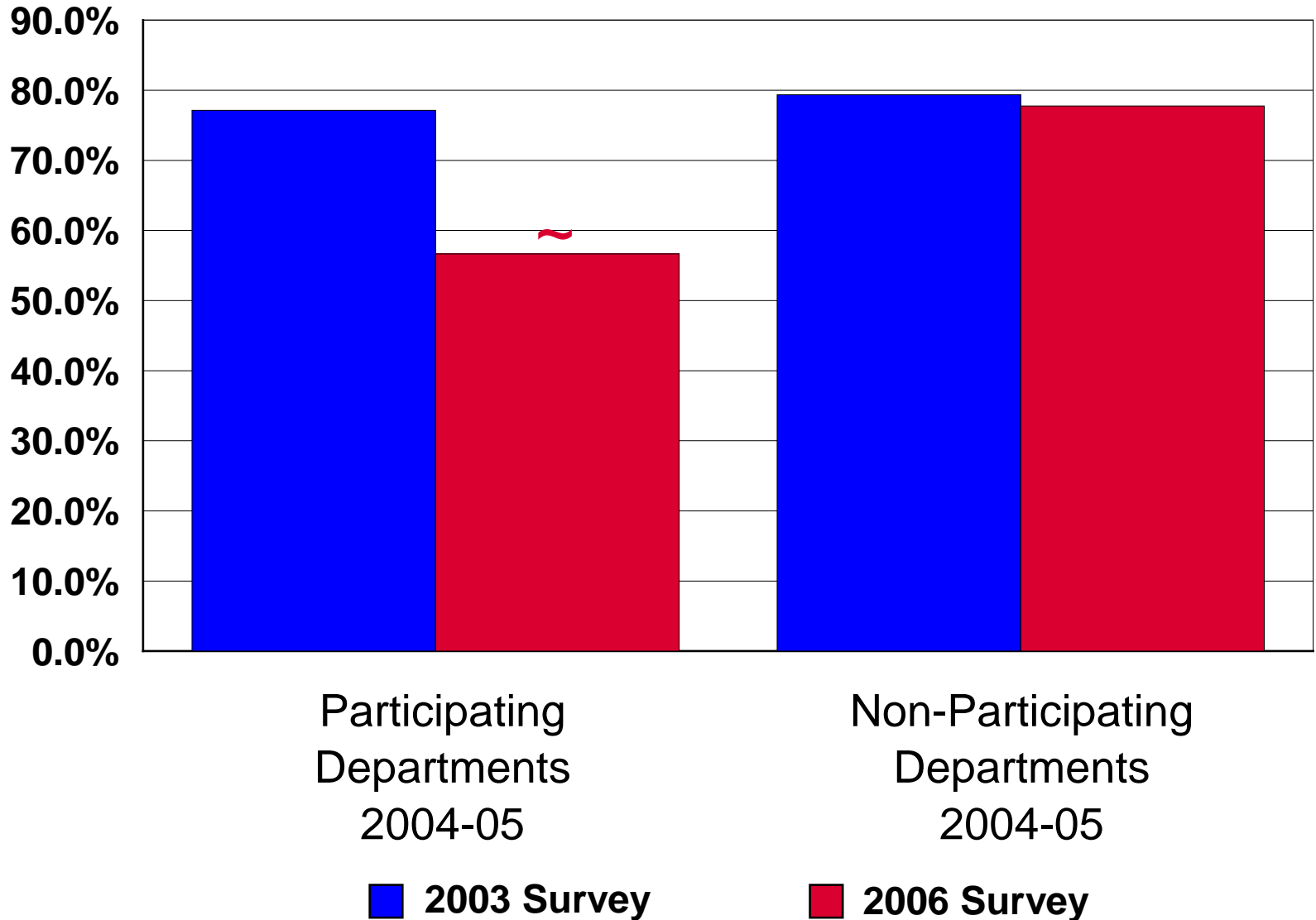


New Hires' Satisfaction* With the Hiring Process Biological & Physical Sciences



* Agree Strongly to the item "I was satisfied with the hiring process overall."

The Climate for Faculty of Color is Good Biological & Physical Sciences





Enhancing Department Climate: A Chair's Role

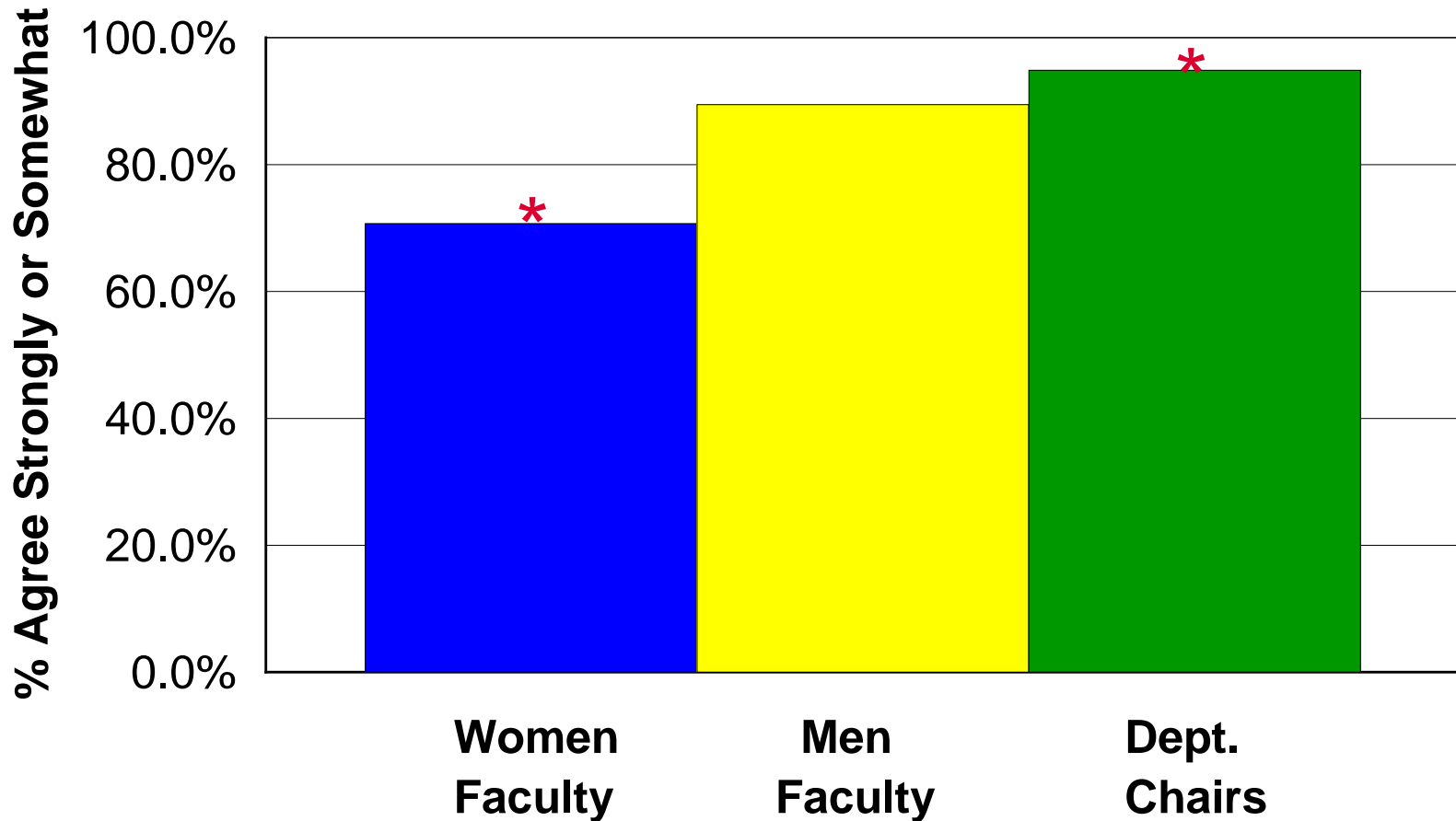
- Individuals experience climate in their immediate workplace – the department
- Chairs can significantly influence womens' experiences in their departments
- Chairs' perspectives of climate differ from those of other faculty, especially women faculty



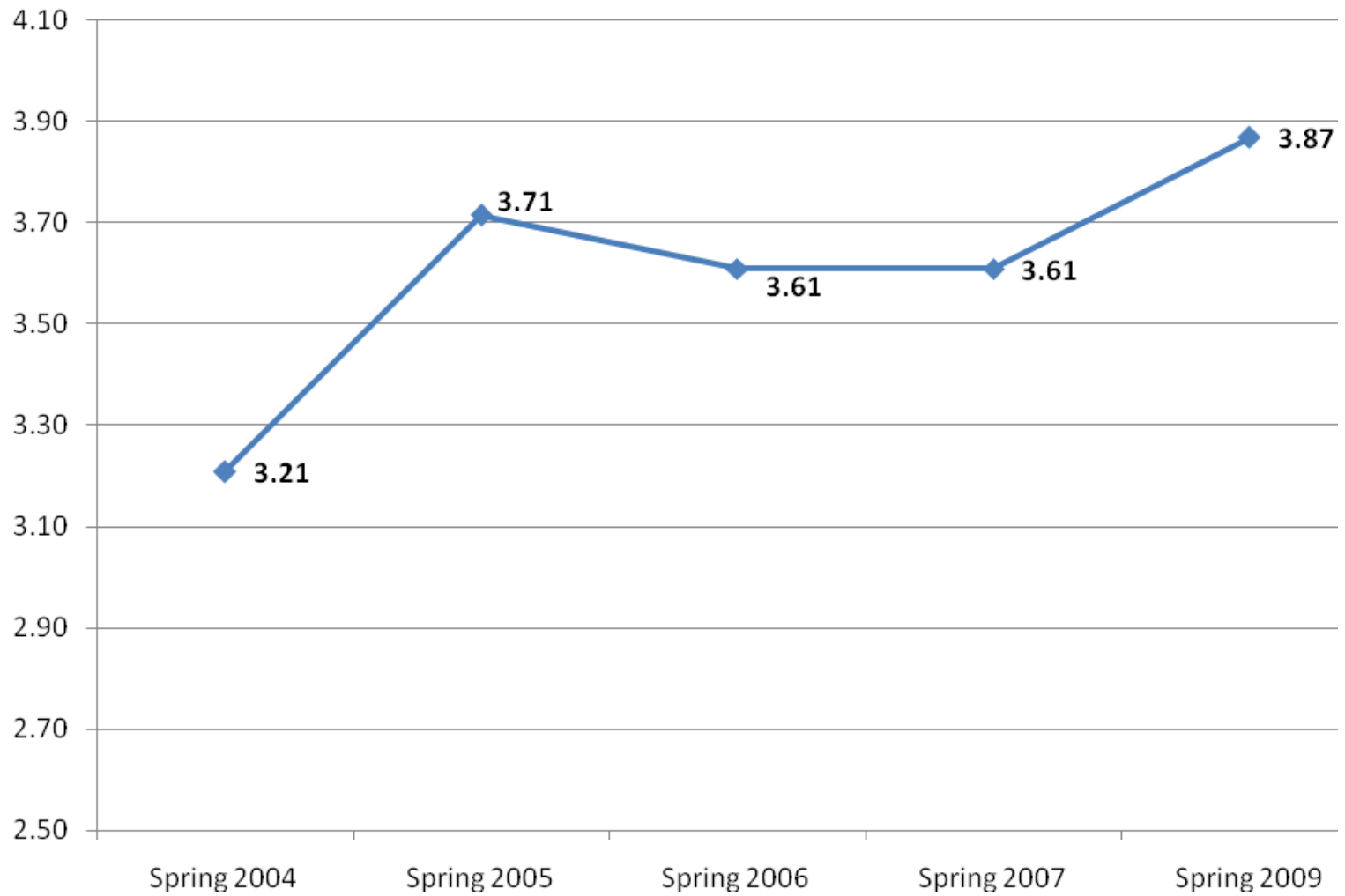
Importance of department chair

“Before I got here, when [X] was chair, two other people had babies under his leadership and [it] was fine! ‘Oh! Congratulations! Good. Take the semester off. You have a grad student to fill in. Okay, that’s no problem.’ Blah blah blah. And it was, you know, a handshake and a nod and, ‘Of course . . . do what you need to do. Let me know when you can get back on your feet’-type thing. Versus [the new] chair has never had kids, does not think the idea of parental leave is meritorious.”

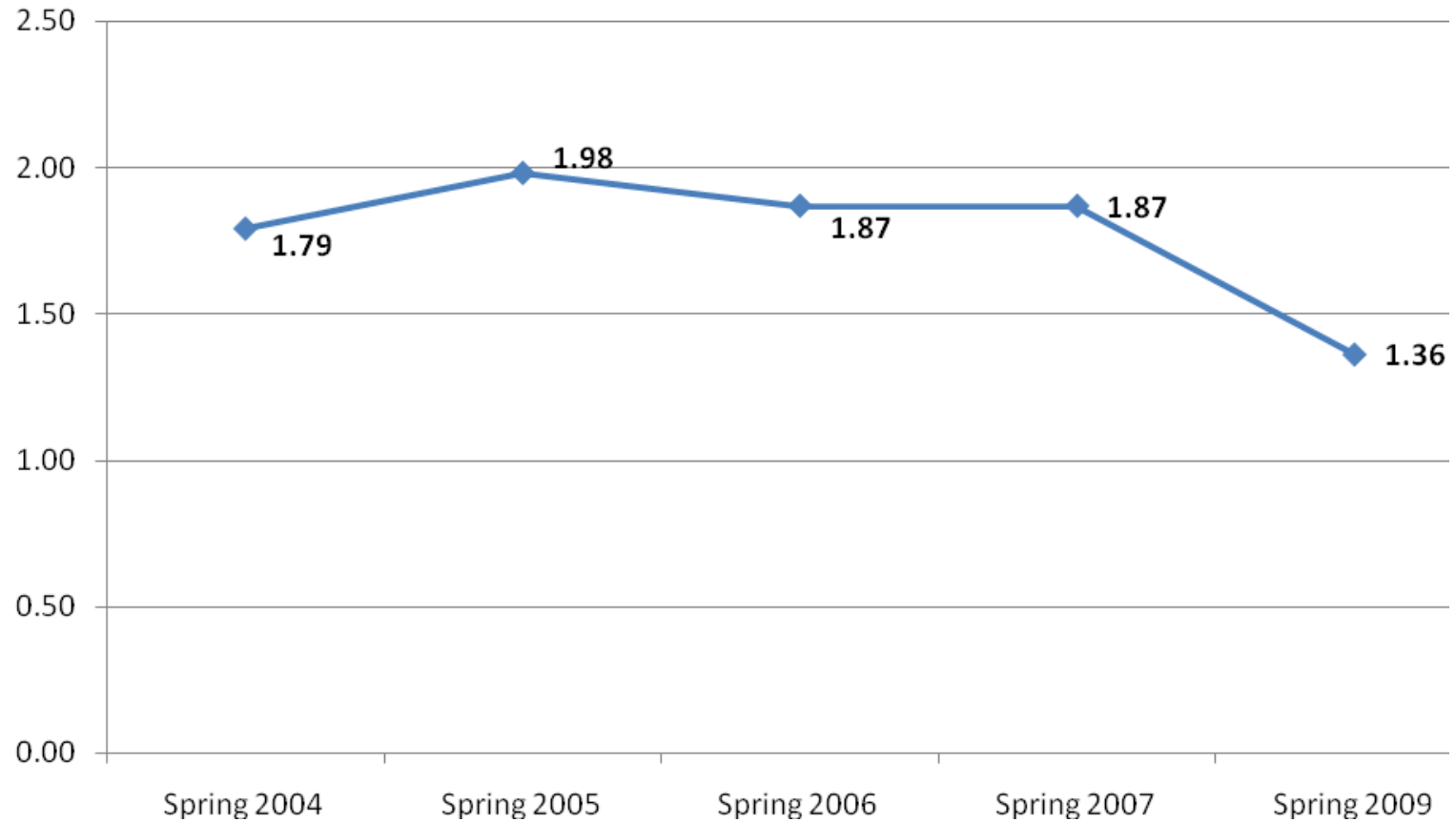
Figure 1. The climate for women in my department is good



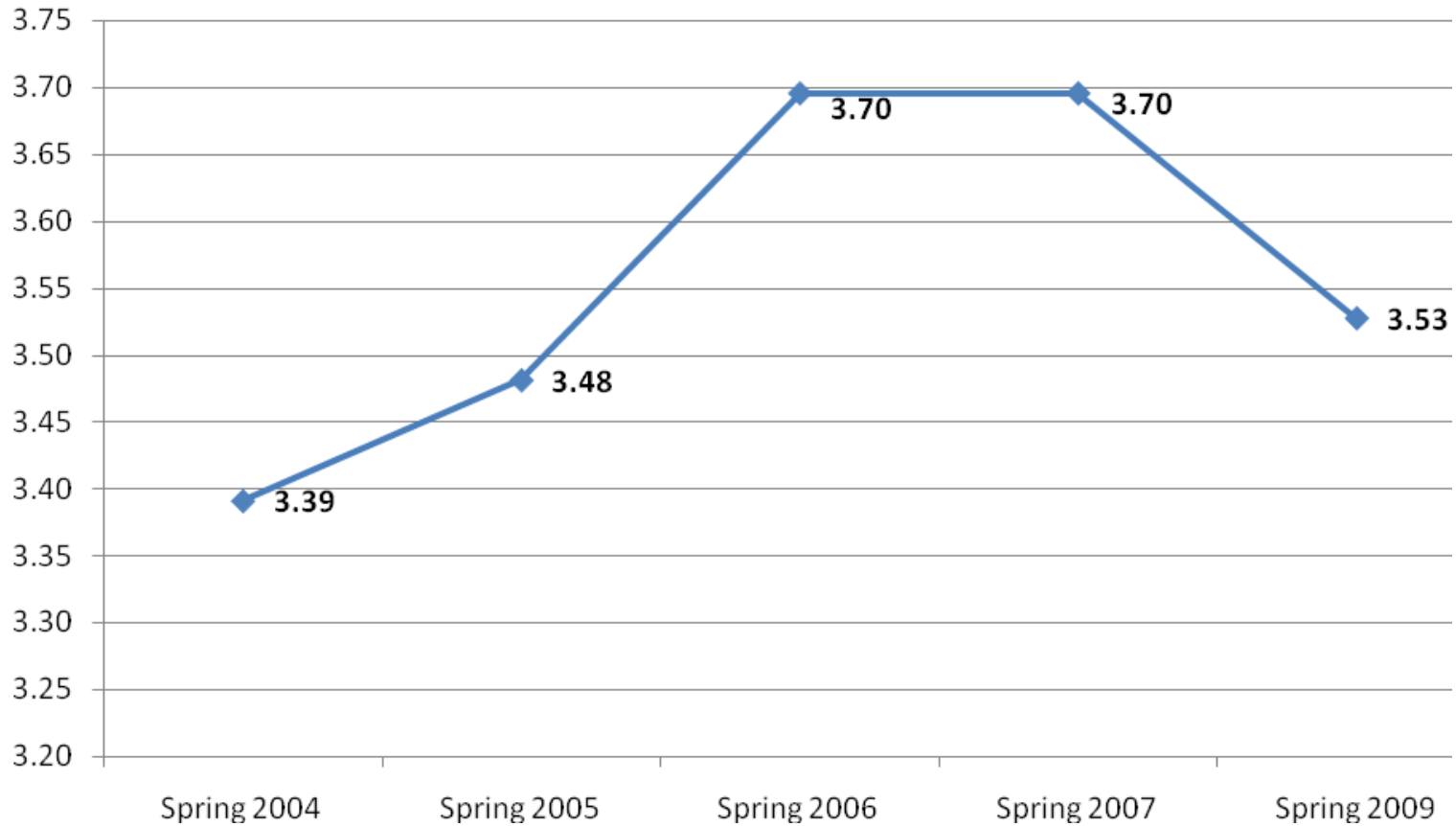
Overall rating of department climate



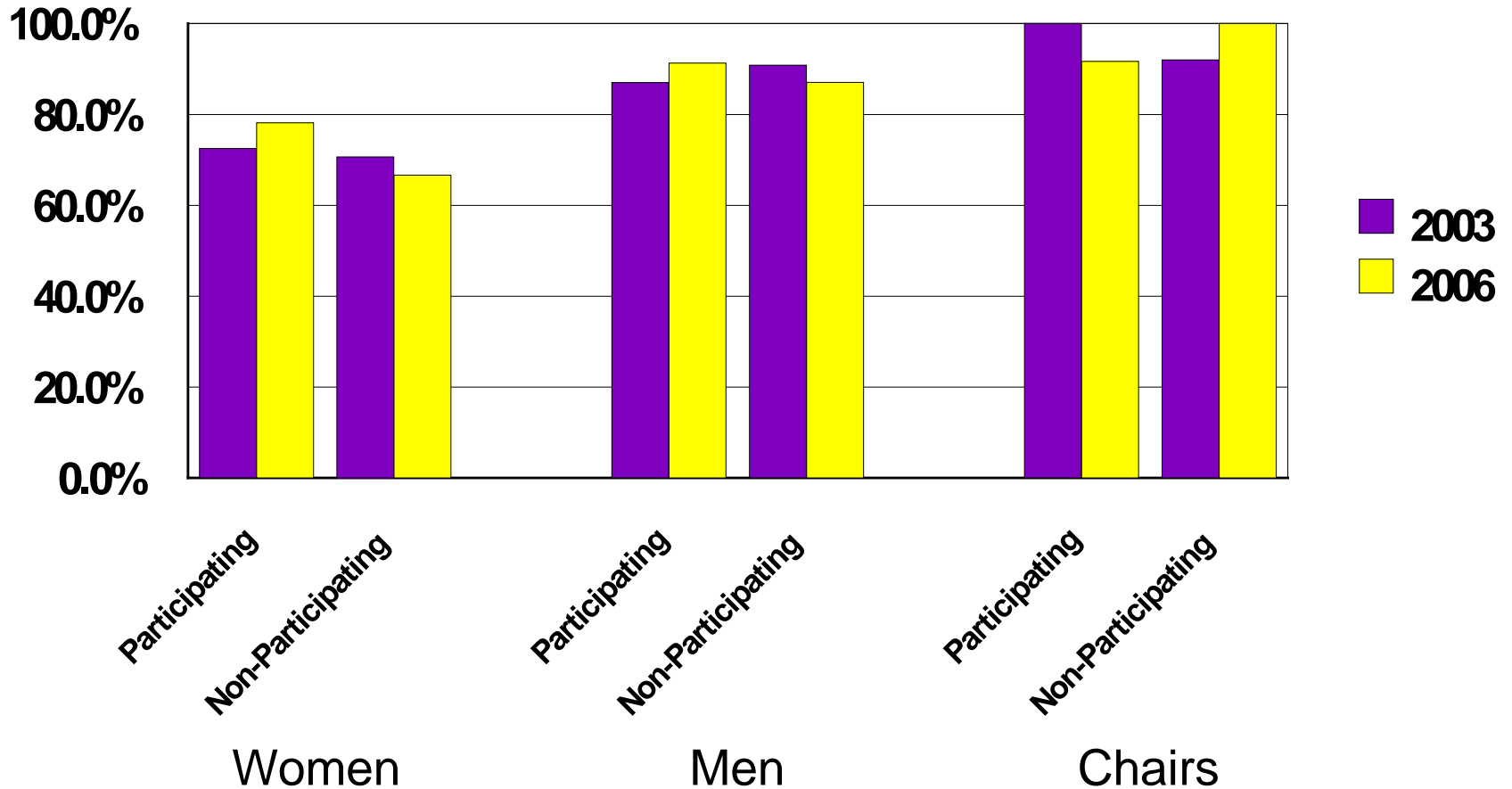
I experience subtle or overt forms of harassment or discrimination due to my gender, race or other personal attributes.



The Chair of the department appropriately consults or delegates decisions to a group or committee.



Percent Agree: The Climate for Women In My Department is Good

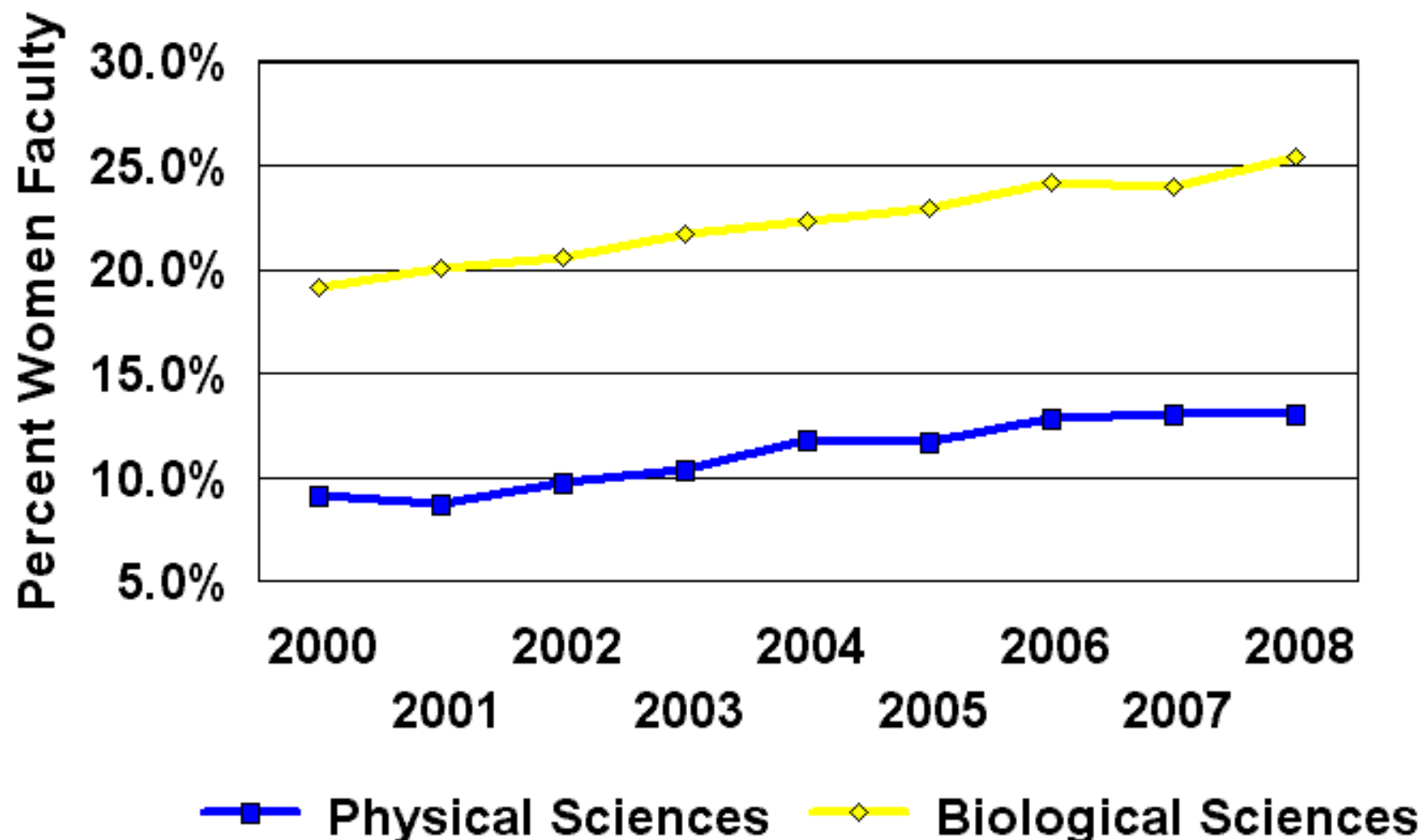




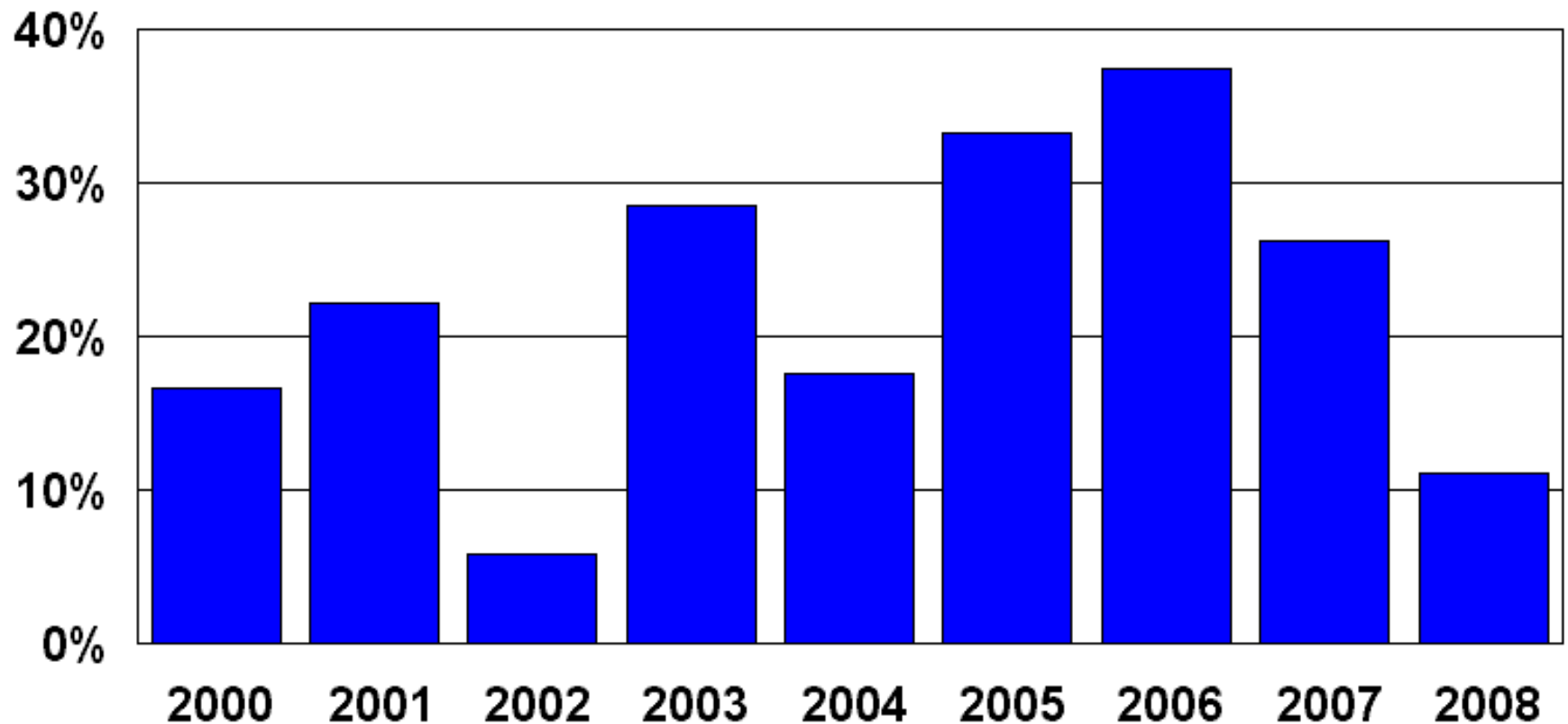
What else?

- Data!
 - NSF indicators
 - Climate surveys
 - Evaluation data
 - Interviews, focus groups

Percent Women Faculty, by Division University of Wisconsin-Madison

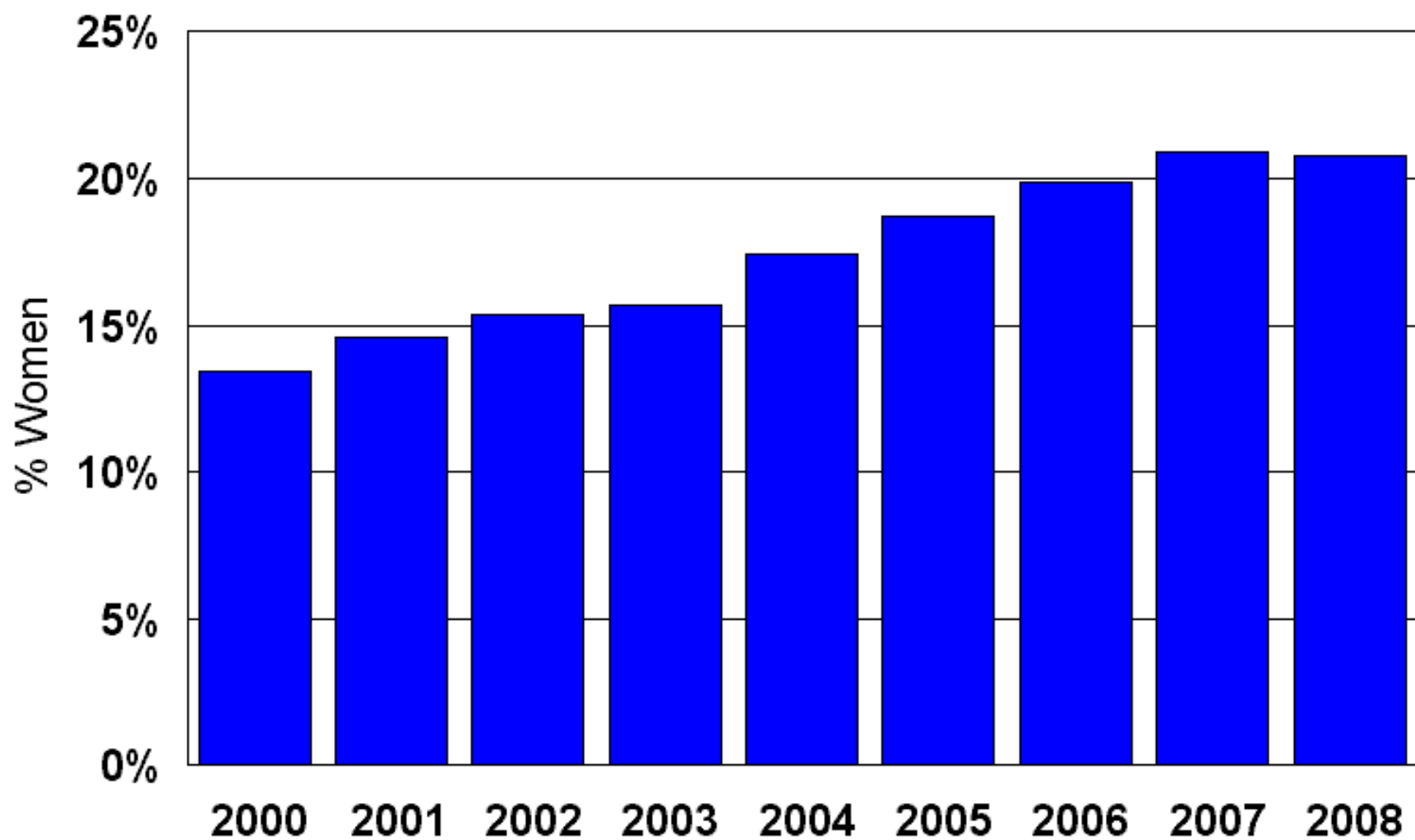


% Female, Major UW-Madison Faculty Awards* Biological & Physical Sciences

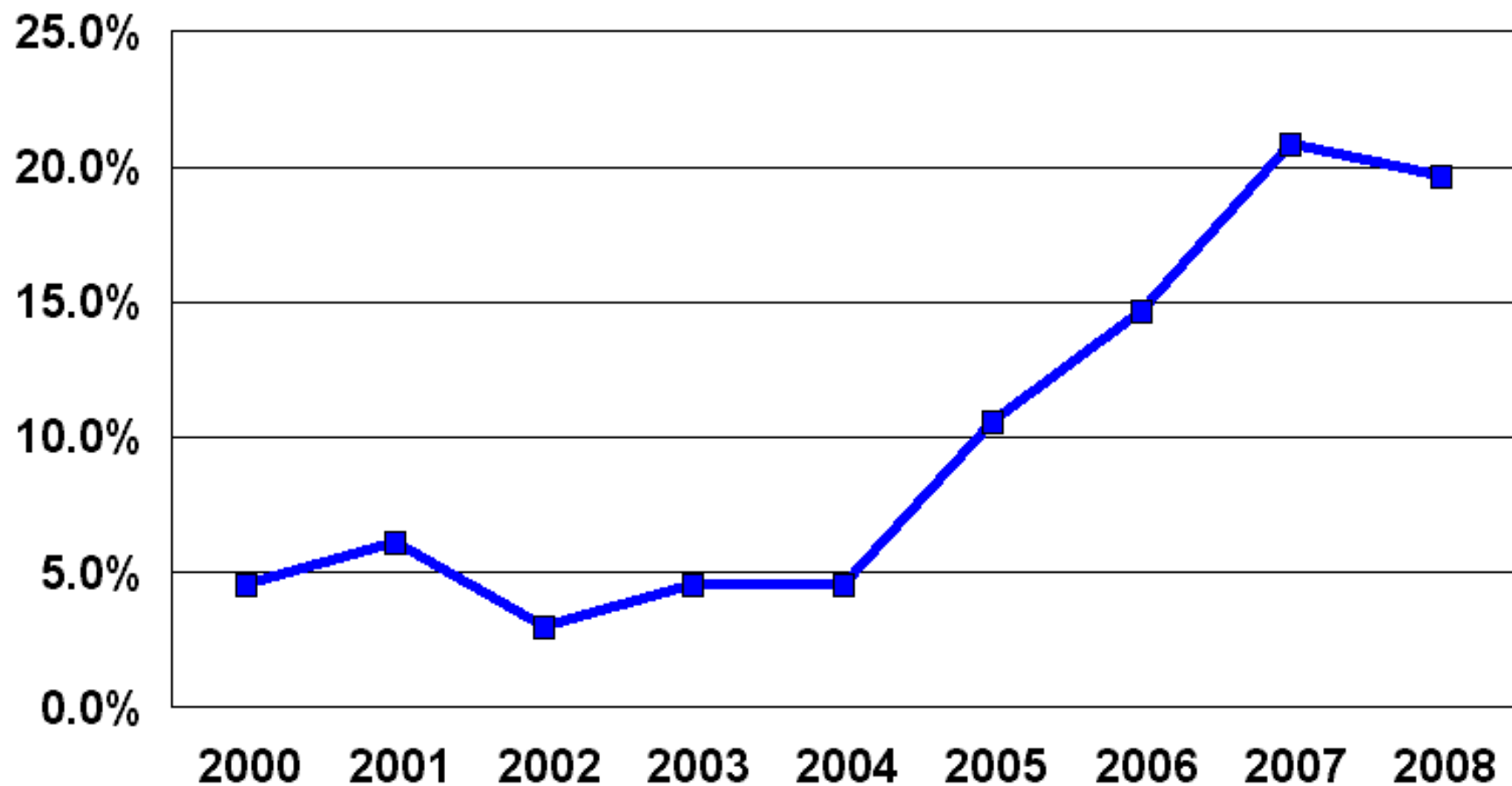


* Vilas Associate, Hilledale, Romnes, Kellett

Women as Percentage of Named Professorship Recipients



% Women Department Chairs Biological & Physical Sciences





ADVANCE Elements of Success

- Support of high-level administrators
- Resources
- Peer-to-peer interactions
- Use of data (both qualitative & quantitative)
- Use of literature on unconscious bias and assumptions
- Active learning strategies
- Fearless intervention when required
- Refrain from gender-specific programming



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