# The Faculty Search Committee: 

## An Institutional Fault Line

Jeanne Ferrante<br>Professor, Computer Science and Engineering<br>Associate Dean, Jacobs School of Engineering<br>University of California, San Diego

## Outline

- Data: do we have a problem?
- Tenure Track Engineering Faculty, 2001-2006
- Incredible Shrinking Pipeline continues
- Practices to Promote Fairness
- Increasing the pool
- Broadening the faculty search language: UCSD
- Increasing awareness of unconscious biases
- Clarifying evaluation metrics
- Stride Committee: U. Michigan
- Amplifying successful search committee methods
- Adding change agents
- Faculty Equity Advisors: UC Irvine
- Focus on diversity in group decision-making
- Conclusions


## Female Tenure Track Engineering Faculty 2001-2006

| 20\% |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 5\% |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| --UCSD Faculty | 8\% | 8\% | 7\% | 7\% | 8\% | 9\% |
| $\ldots$ Avg Top US News Faculty | 9\% | 9\% | 10\% | 11\% | 11\% | 12\% |
| ```Avg Top US New s PhDs Granted``` | 16\% | 17\% | 17\% | 16\% | 17\% | 19\% |
| $\begin{aligned} & \text {-_ Availability (based on PhDs past } \\ & 20 \text { yrs) } \end{aligned}$ | 12\% |  | 13\% |  | 13\% |  |

US News Top 10 Engineering Schools: MIT, Stanford, Berkeley, Illinois, Carnegie, USC, Michigan, Cornell, Texas Austin, Purdue.
Availability: UCSD Academic Affairs.

## Underrepresented Minority Tenure Track Engineering Faculty, 2001-2006



US News Top 10 Engineering Schools: MIT, Stanford, Berkeley, Illinois, Carnegie, USC, Michigan, Cornell, Texas Austin, Purdue.
Underrepresented Minorities: African-American, American Indian, Hispanic.
Availability: UCSD Academic Affairs.
PhD's, Faculty by Gender and Ethnicity: www.asee.org

## "Incredible Shrinking Pipeline"

- What's happening?
- Misperceptions of the field
- Stereotypes related to gender and ethnicity
- Teachers, parents, peers, ....
- Importance of context and relevance to women, URM
- Lack of self-confidence
- Lack of negotiation skills, and accumulation of effects

Babcock \& Lashever, Women Don't Ask, Princeton U. Press, 2003

- Lack of critical mass, isolation
- Law of Educational Diversity: "Everything bad happens worse to members of out-groups"
Margolis \& Fisher, "Top 10 Ideas for Involving More Women In Computing", 2006
- "Canaries in the mine" Blum, NY Times, 2007


## Increasing the Pool

- Since 2004, Jacobs School of Engineering faculty job postings at UCSD include:
- Exceptional candidates in all areas will be given serious consideration.
- Applicants are asked to include a personal statement summarizing teaching experience and interests, leadership efforts and contributions to diversity.
- Dean also holds back 1-2 FTEs each year
- Outcome: + 4 new women, 2004-2006


## Unconscious Biases: Schemas

- Hypotheses we use to interpret the world: thin slices*
- Widely culturally shared
- Both men and women hold them about gender
- Both whites and people of color hold them about race
- Often unconscious
- Applied more under circumstances of:


7
» Ambiguity
» Stress and time pressure
» Lack of critical mass
Valian (1998) Why So Slow? The Advancement of Women. Cambridge: MIT Press
http://www.hunter.cuny.edu/gendertutorial/tutorials.htm

* Gladwell (2005) blink: The Power of Thinking

Without Thinking. Little Brown \& Co.


## Schemas Affect Evaluation

-Evaluation of CVs: Bertrand \& Mullainathan (2003) Poverty Action Lab, 3, -2-27.

- White names favored over African-American names for interview callback (3:2).
-Evaluation of resumes: steinpreis, Anders, \& Ritzke (1999) Sex Roles, 41, 509.
- "Brian" preferred over "Karen" (2:1)
-Evaluation of post-doc fellowship applications:
Wenneras \& Wold (1997) Nature, 387, 341.
- Women had to be 2.5 times more productive to rate equally in scientific competence as the average male
"Although scientists like to believe that they 'choose the best' based on objective criteria, decisions are influenced by factors-including biases about race, sex, geographic location of a university, and agethat have nothing to do with the quality of the person or work being evaluated." The National Academies (2006). Beyond Bias and Barriers


## Clarifying Evaluation Metrics

## U. Michigan ADVANCE STRIDE Committee

- "Provides information and advice about practices that will maximize the likelihood that diverse, well-qualified candidates will be identified, and if selected for offers, recruited, retained, and promoted"
- Form to evaluate evidence of (or potential ability for)
- Scholarly impact
- Research productivity
- Research funding
- Collaboration
- Fit with department's priorities
- Make positive contribution to department's climate
- Attract and supervise graduate students
- Teach and supervise undergraduates
- Be a conscientious university community member


## Outcomes:

Percentage of women in S\&E went from $15.7 \%$ in ' 01 to $31.3 \%$ in ' 03

## Amplifying Success:

 Positive Deviance- Which search committees/chairs are already being successful?
- What practices are being used that are different than the norm?
- How can these practices be transferred at your institution?
- Monitor and evaluate...
- Disseminate and scale up


## Change Agents: UC Irvine ADVANCE Equity Advisors

- "Participate in faculty recruiting by approving search strategies and raising awareness of Best Practices. Organize faculty development programs, with both formal and informal mentoring, as well as address individual issues raised by women faculty."


## Senior faculty members in each school

- Appointed as Faculty Assistant to the Dean
- 2-year term (with stipend)
- Participate directly in departmental recruitment process
- Implement mentoring, faculty development programs in school
- Proactively investigate inequities


## Outcomes:

Percentage of women hired from $27.5 \%$ in ' 02 to $57 \%$ in '06
Percentage of women in ICS went from 18\% in '02 to $44 \%$ in '06
Recommended by UCSD Workgroup on Faculty Diversity, and recently approved by Chancellor

11
http://advance.uci.edu/
쿤UCSD $\mid$ School of
Jacobs Engineering

## Diversity in Group Decision-Making

Sommers, On Racial Diversity and Group Decision Making, J. Personality and Social Psychology, 2006

- Mock juries: mixed and all White
- Video trial with black defendant

Deliberation Analysis of juries:
Mixed groups performed better

- Whites cited more facts, made fewer mistakes, more willing to discuss race
- Before discussion, whites more open-minded toward defendant
Suggestive that reminders/ motivation to avoid prejudice can lead to more systematic decisionmaking


## Conclusions

- Start with Data
- Good news is most people want to be fair
- Broaden pool via search language
- Most bias unconscious, education can help
- Dialogue around fairness of metrics
- Reward positive deviance on search committees
- Increase awareness to change behavior
"The problem is not simply the pipeline."
The National Academies (2006). Beyond Bias and Barriers

