

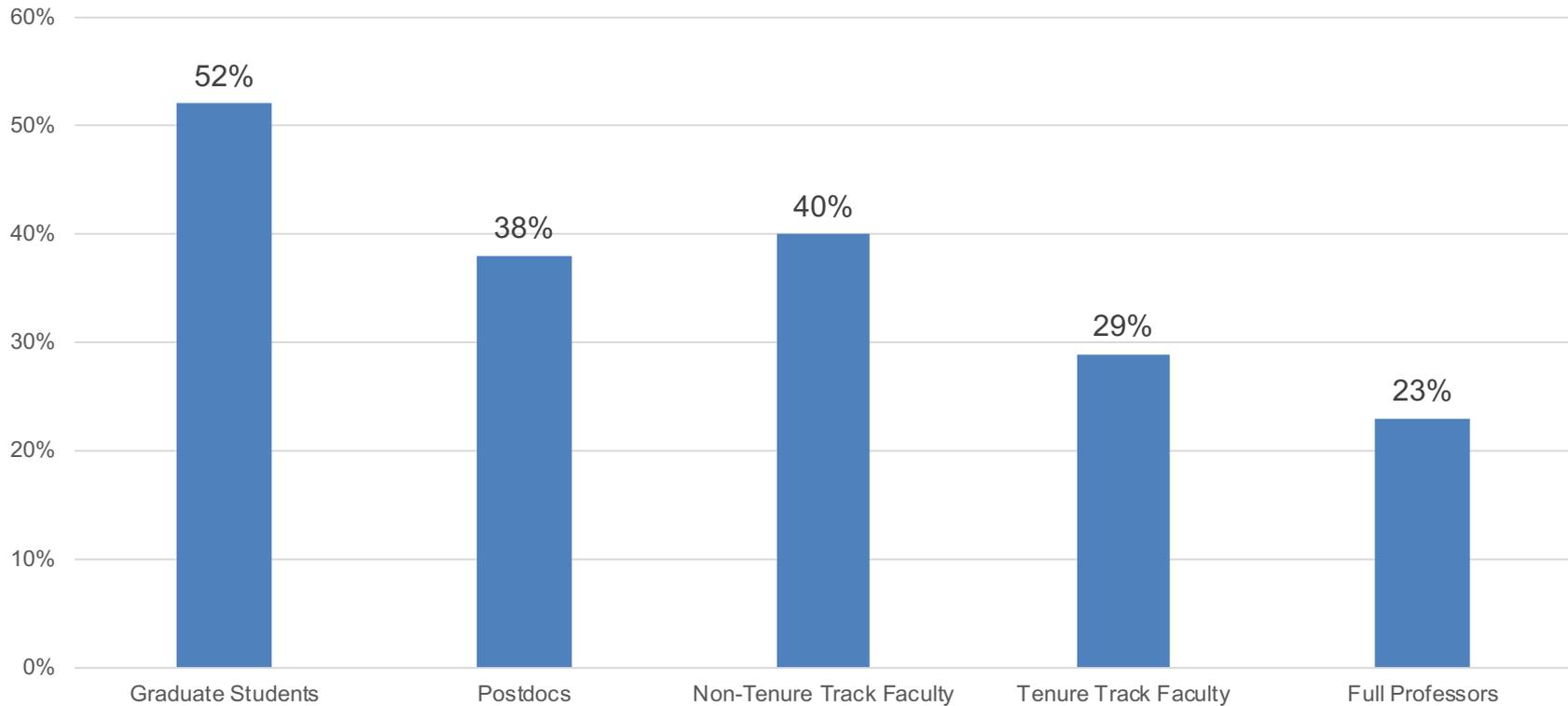
Increasing Women in Neuroscience (IWiN) Toolkit

Candidate Recruitment and Evaluation

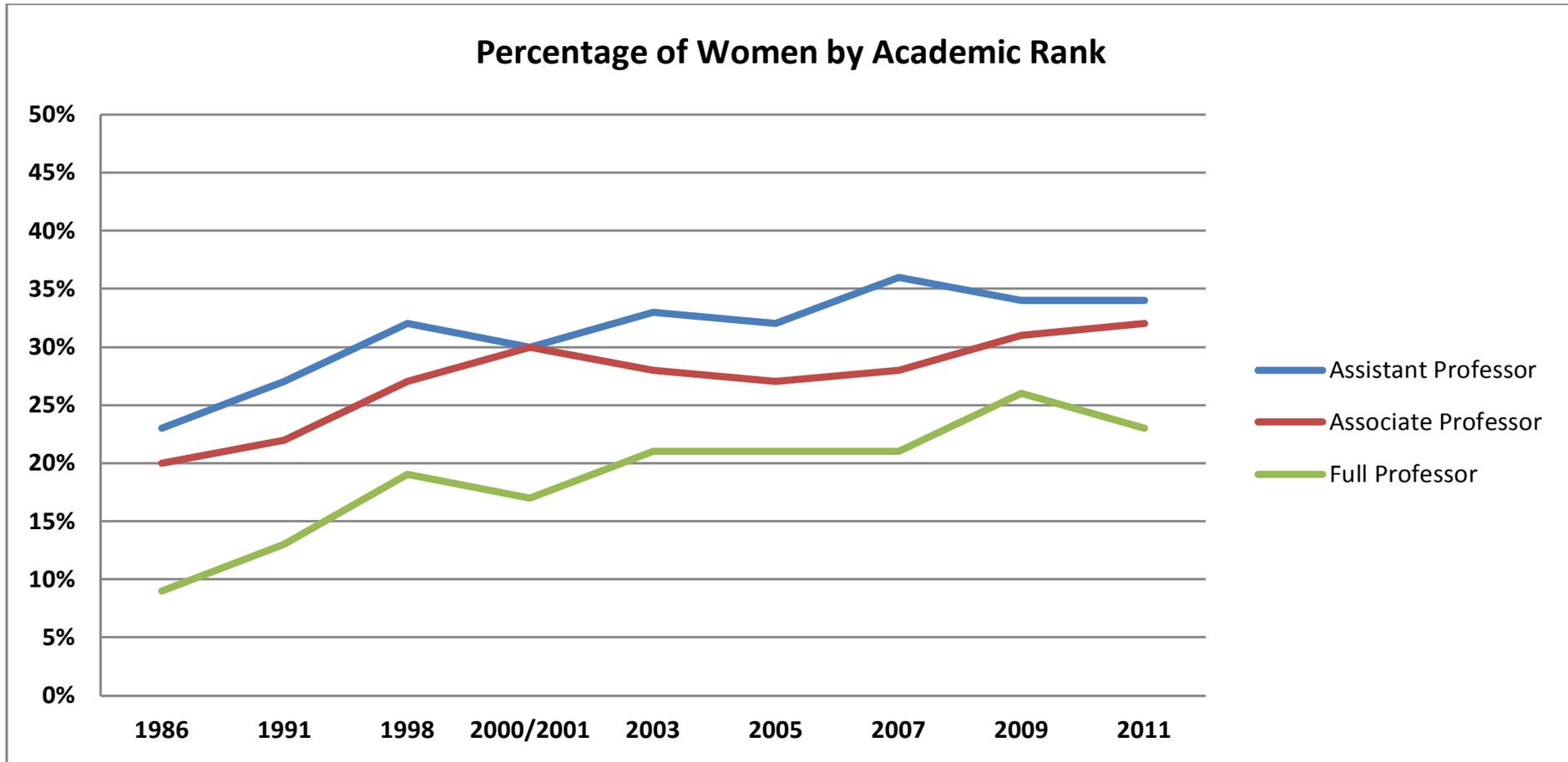
Created by the Professional Development Committee
of the Society for Neuroscience

The Problem: The Leaky Pipeline

2011 CNDP Survey of Neuroscience Graduate, Postdoctoral, & Undergraduate Programs



Women were 24% of the faculty in 1998 and in 2011 were only 29% of the total



In contrast, women represent approximately 40% of non-tenure-stream faculty members in AY2010-2011, a number that has remained stable during the past five surveys.

Growth of women neuroscientists in tenure-track faculty positions is slow (% total)

Year	Graduate Student	Postdoc	Non-Tenure Track	Tenure Track	Assistant Professor	Associate Professor	Full Professor
1986				15	23	20	9
1991					27	22	13
1998				24	32	27	19
2000	47	40	43	21	30	26	14
2003	50	42	43	25	33	28	21
2005	52	41	38	25	32	27	21
2007	52	44	44	26	36	28	21
2009	54	37	44	29	34	31	26
2011	57	38	40	29	34	32	23

*Data from ANDP and SfN Neuroscience Training Survey of Graduate, Postdoctoral, & Undergraduate Programs

The Leaky Pipeline: Across STEM

Discipline/Field	PhD	Postdoc	Total Faculty
Neuroscience (1)	52	44	29
Physiology (2)	48	44	23
Chemistry (3)	-	-	14
Life Sciences (4)	49	40	32
Doctoral Univ (5)	-	-	30
Computer Science (6)	21	-	21*
Engineering (6)	20	-	10*

(1) = 2011 Neuroscience Training Survey of Graduate, Postdoctoral, & Undergraduate Programs

(2) = Association of Chairs of Departments of Physiology 2007 Survey (The Physiologist 51:87, 2008)

(3) = Chemical and Engineering News 2006 Survey (C&EN 84:58, 2006)

(4) = NSF Survey of Earned Doctorates 1998-2005; Survey of Doctoral Recipients 1973-2006

(5) = American Association of University Professors Faculty Equity Indicators 2006

(6) = NSF Survey of Women in Faculty S&E Positions 1958-2006

* Percentages are representative of tenured and tenure track faculty only

2009 Neuroscience Training Survey

“At the most recent rate of increase, it could take as long as four decades before women comprise 50% of the tenure-stream faculty members in neuroscience unless graduate programs become even more committed than they now are to a policy of gender equality in their faculty. A similar statement can be made regarding members of underrepresented U.S. racial and ethnic minorities among faculty in graduate neuroscience programs.”

What is Causing the Leaky Pipeline?

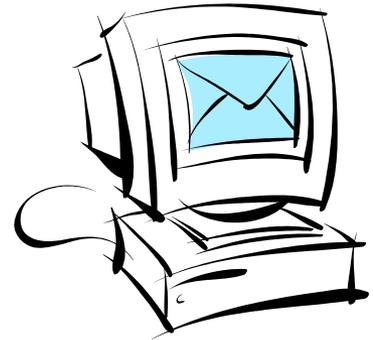
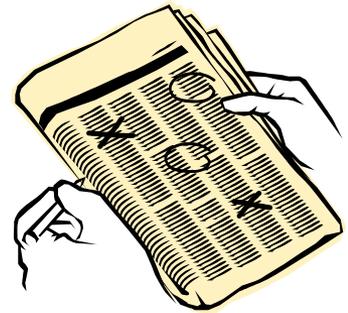
- Why has the representation of women in the professorate remained low at 25% tenure track female faculty and 21% female full professors?
 - Not due to a failure to recruit at the graduate student level.
 - A disproportionate number of women graduates fail to secure tenure track positions.
 - Fewer women are promoted from Asst. Prof to Assoc. and Full Professor.

The Leaky Pipeline: What Can Be Done?

- Understand Implicit Bias
- **Employ Open Recruitment and Evaluation Practices (this module)**
- Mentoring, Promotion and Tenure Practices
- Address Workplace Climate Issues

Recruiting Strategies to Increase Diversity

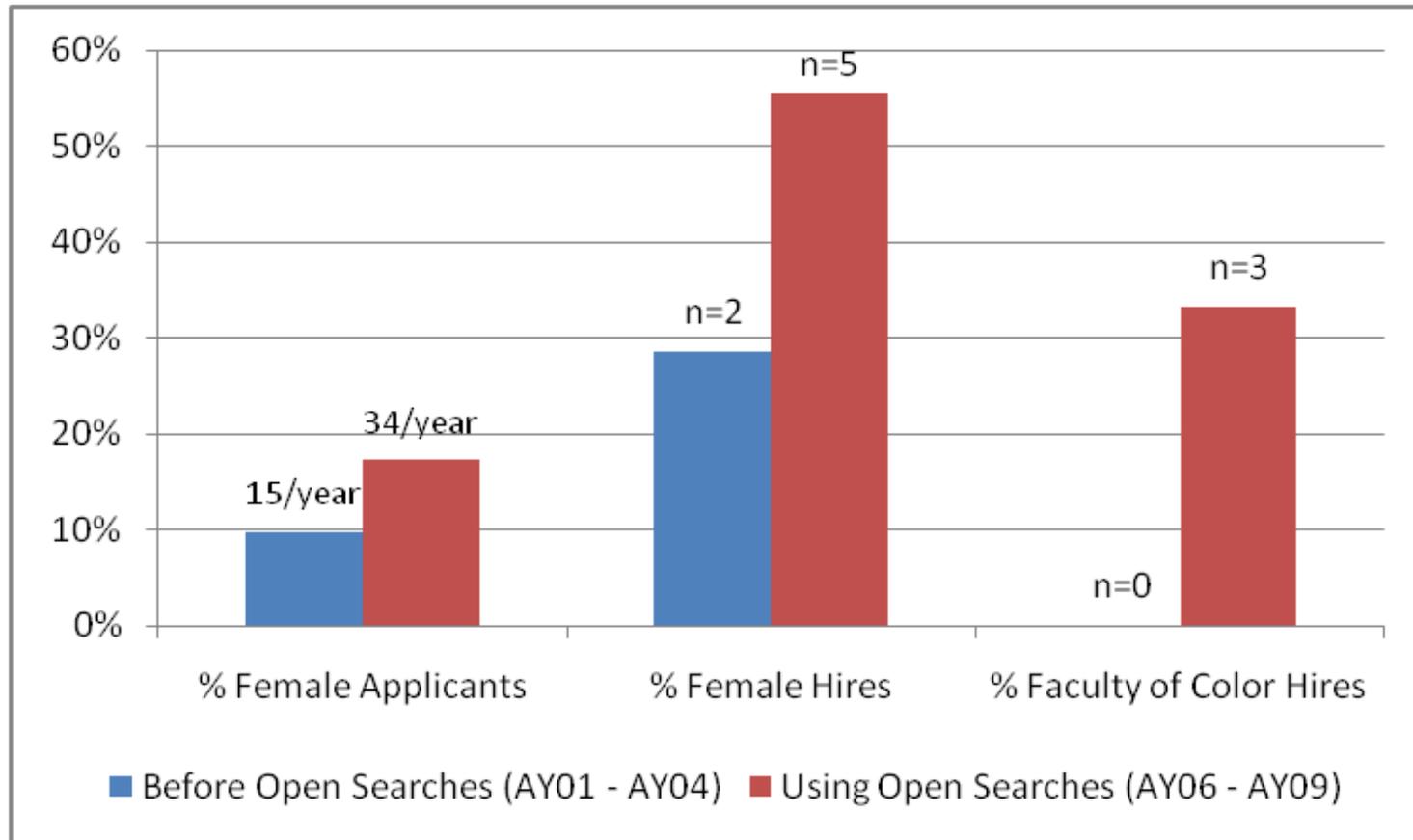
- Prime the pump – searching begins before position is available
- Search committee composition
- Job description – “open” searches
- Advertisement and active recruiting
- Promote awareness of the issues
- Interviewing tips



Recruiting Strategies to Increase Diversity

- Cast a wide net
- Open Searches: Define the position in the widest possible terms consistent with the department's needs.
- Be proactive: Seek out people you think are right for the job, even if they're not actively looking.

Active Recruiting and Open Searches: A University of Michigan Success Story



The difference achieved by one UMich department

Qualitative Feedback on the Use of Open Searches at University of Michigan

"The open searches led to both a larger number of applicants AND a more diverse applicant pool."

"I was not sure if the 'open search' is the best way to attract the best candidates to apply for job. I am convinced now it is indeed an excellent strategy to add 'new blood' to our department."

"The open searches led to a department-wide discussion of all of the applicants. This has the added benefit of everyone on the faculty knowing the candidate and being invested in their success from their first day on campus."

Evaluation of Candidates and Reviewing Applications

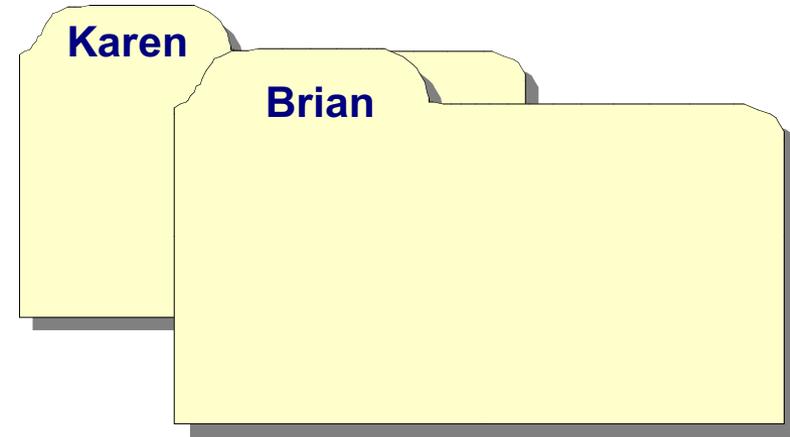
Promote Awareness of Evaluation Bias

- Awareness of evaluation bias is a critical first step
 - Blind Auditions
 - CVs and Resumes
 - Letters of Recommendation

(see module 1, Implicit Bias for more information)
- Spread awareness to entire search committee.
- Understand that evaluation bias can be counteracted.

Evaluation of Identical CVs: Gender

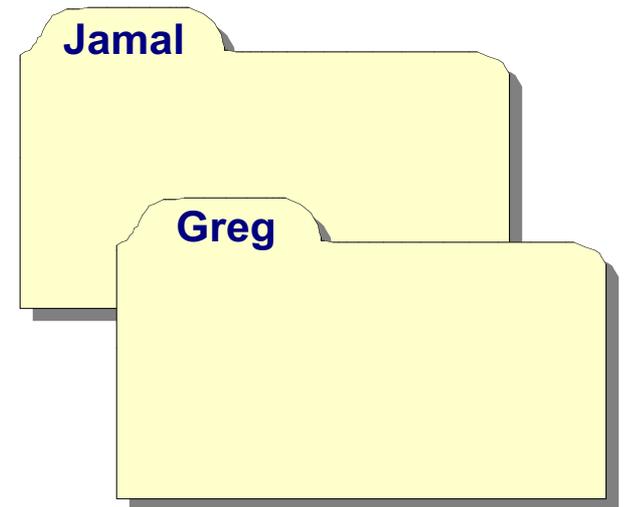
- When evaluating identical application packages, both male and female University psychology professors preferred 2:1 to hire “Brian” over “Karen” as an assistant professor.
- When evaluating a more experienced record (at the point of promotion to tenure), reservations were expressed four times more often when the name was female.



Science faculty's subtle gender biases favor male students
Corinne A. Moss-Racusina,^b John F. Dovidio,^b Victoria L. Brescoll,^c Mark J. Graham,^d and Jo Handelsman,
PNAS (2012)

Evaluation of Identical Resumes: Race

- Applicants with African American-sounding names had to send 15 resumes to get a callback, compared to 10 needed by applicants with white-sounding names.
- White names yielded as many more callbacks as an additional eight years of experience.



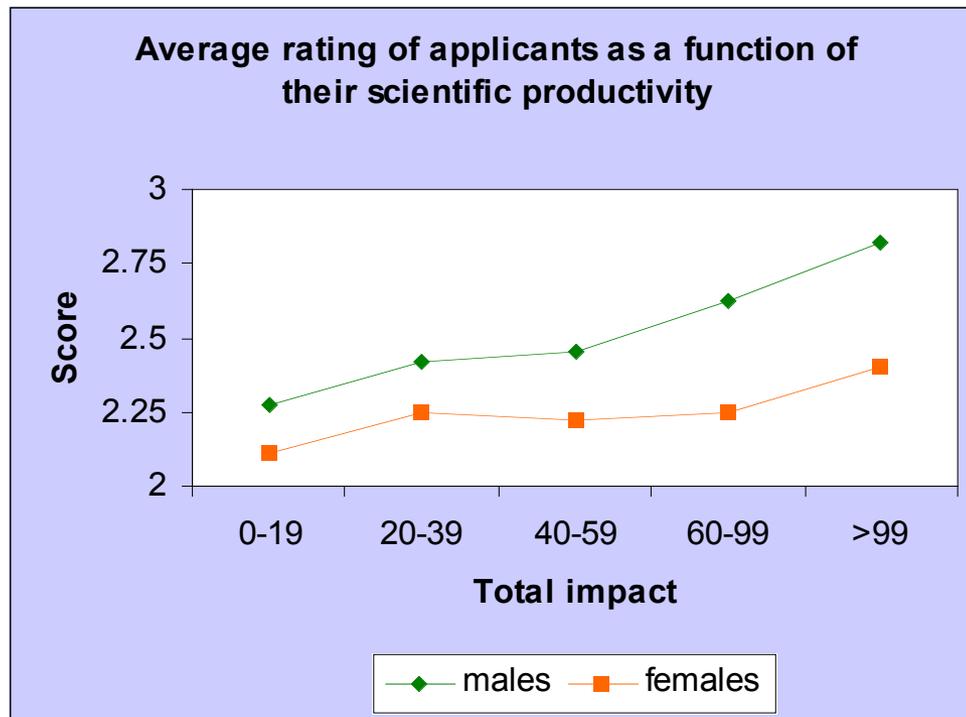
Why do race cues produce different evaluations?

Ambiguity in Job Credentials: Race

- Identical resumes, but ambiguous fit of credentials to job (rather than ambiguous credentials)
 - A sample of white evaluators recommended
 - Black candidate 45% of the time
 - White candidate 76% of the time
- With awards - criteria can shift to meet the strengths of individual (white male) candidates if due diligence is not paid.

Evaluation of Fellowship Applications: Gender

“...the success rate of female scientists applying for postdoctoral fellowships at the [Swedish Medical Research Council] during the 1990s has been less than half that of male applicants.”



Wenneras & Wold (1997) *Nature*, 387, 341.

Letters of Recommendation for Successful Medical School Faculty Applicants

Letters for men:

- Longer
- More references to:
 - CV
 - Publications
 - Patients
 - Colleagues

Letters for women:

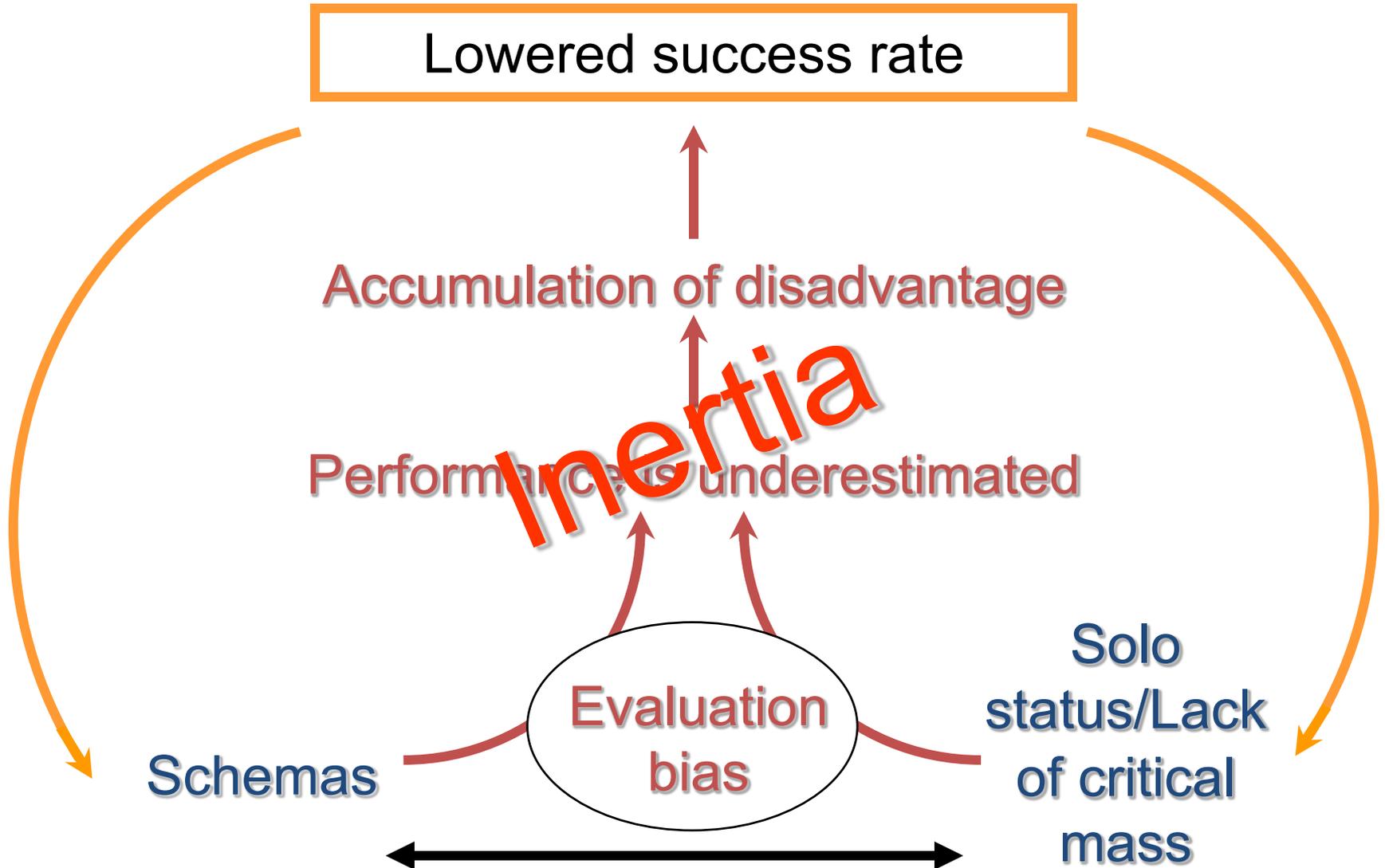
- Shorter
- More references to personal life
- More “doubt raisers” (hedges, faint praise, and irrelevancies)
 - “It’s amazing how much she’s accomplished.”
 - “It appears her health is stable.”
 - “She is close to my wife.”

Critical Mass Affects the Use of Implicit Bias in Evaluations

- When there are many individuals, we differentiate among them and cannot rely on group-based schemas.
- In both experimental and field settings, increasing the female share of those being rated increased ratings of female applicants and employees.

Valian (1998) *Why So Slow? The Advancement of Women*. Cambridge: MIT Press, p. 280;
Heilman (1980) *Organizational Behavior and Human Performance*, 26: 386-395;
Sackett et al (1991), *Journal of Applied Psychology*, 76(2): 263-267.

If We Do Not Actively Intervene, The Cycle Reproduces Itself



Focus on Multiple Specific Criteria During Evaluation

- Weigh judgments that reflect examination of all materials and direct contact with the candidate.
- Specify evaluations of scholarly productivity, research funding, teaching ability, ability to be a conscientious departmental/university member, fit with the department's priorities.
- Avoid “global” evaluations

Candidate Evaluation Tool

Please indicate which of the following are true for you (check all that apply):

- Read candidate's CV
- Read candidate's scholarship
- Read candidate's letters of recommendation
- Attended candidate's job talk
- Met with candidate
- Attended lunch or dinner with candidate
- Other (please explain):

Please rate the candidate on each of the following:	excellent	good	neutral	fair	poor	unable to judge
Potential for (Evidence of) scholarly impact						
Potential for (Evidence of) research productivity						
Potential for (Evidence of) research funding						
Potential for (Evidence of) collaboration						
Fit with department's priorities						
Ability to make positive contribution to department's climate						
Potential (Demonstrated ability) to attract and supervise graduate students						
Potential (Demonstrated ability) to teach and supervise undergraduates						
Potential (Demonstrated ability) to be a conscientious university community member						



Reviewing Applications

- Be objective
- Use clear ranking criteria
- Get input from institutional leaders
- Evaluate the interview process

Interviewing Tips

- Bringing in more than one female and/or minority candidate can disproportionately increase the likelihood that a woman and/or minority will be hired.
- Treat female and minority faculty applicants as scholars and educators, not as just female or minority scholars and educators.
- Ensure that all candidates will meet a diverse set of people so that they are more likely to meet someone like them.

Heilman , 1980, *Organizational Behavior and Human Performance*, 26: 386-95.
Hewstone et al., 2006, *Group Processes & Intergroup Relations*, 9(4): 509–532.
Huffcutt & Roth, 1998, *Journal of Applied Psychology*, 83(2): 179-189.
Van Ommeren et al., 2005, *Psychological Reports*, 96: 349-360.

Asking Non-Job-Related Questions Can Be Counter-Productive

In a 2007 study of candidates for positions at a Univ Michigan department, who withdrew from searches or turned down offers, several women mentioned that they had been asked illegal and discriminatory questions about their personal lives.

- One candidate reported that she did not answer truthfully (knew the “right” answer and gave it)
- One candidate reported that she resented the questions

Dual Career Issues Should Not be Discussed by the Search Committee

- Identify someone with whom the candidate can have a confidential conversation in which they could ask questions they don't want to ask the search committee.
- Ensure all candidates know about dual career support mechanisms available at your institution.
- Support for dual careers enhances both recruitment and retention of men and women.

Top Mistakes in Recruitment

- Committee or faculty make summary judgments about candidates without using specific criteria.
- Committee does not have a diverse pool.
- The committee discussed information about the candidate that is inappropriate.
- Asking counter-productive questions.
- Telling a woman or underrepresented minority candidate that "we want you because we need diversity."
- The candidate does not meet others like themselves during the visit.

Cognitive Errors during Evaluation

- Negative stereotypes: far more evidence is required to be certain an individual has an “unexpected” attribute (competence)
- Positive stereotypes: earn extra points due to presumption of competence
- Raising the bar: happens during evaluation when candidate is member of group thought to be suspect/incompetent
- Elitism
- First impressions (dress, posture, laughter)

Mistakes During Recruitment

- The longing to clone: reproducing self, search committee members, retiring faculty member
- Good fit/Bad fit: Will we feel comfortable and culturally at ease?
- Provincialism: undervaluing something outside own province, circle or clan

Mistakes During Recruitment

Distorting and ignoring evidence:

- Extraneous myths (no qualified women or URMs) and psychoanalyzing candidate (candidate won't come because too rural/small, salary too low)
- Wishful thinking (rhetoric, not evidence); holding to notion in spite of overwhelming evidence to contrary, allowing it to cloud cognitive processes
- Self-fulfilling prophecy: set up situations that spotlight person in positive or negative way
- Character over context: e.g., lack of awareness of implicit bias in teaching evaluations
- Premature ranking/digging in
- Momentum of the group

Mistakes During Recruitment

- These mistakes contaminate and undermine the credibility and equity of various evaluation reviews; they are magnified by bad practices at the organizational level

What Else Can Be Done?

- Make a high quality offer
- Employ family friendly work practices
- Equitable teaching, minimal committee work (at the start), a mentoring plan.

Conclusions

- Implicit bias affects evaluation.
- Cast a wide net.
- Open searches enhance recruitment of women and minorities.
- Use explicit evaluation criteria in selection of candidates to interview and in evaluation of candidates after the interview.
- Avoid cognitive errors during interview and evaluations.