



Workshop on Faculty Recruitment for Diversity and Excellence

**NSF ADVANCE Project at the University of Michigan
Strategies and Tactics for Recruiting to Improve Diversity and Excellence**

Overview

- What is the problem?
- What are the obstacles to achieving diversity on the faculty?
- Why has it been so difficult to overcome the obstacles?
- What can we do?



What is the problem?

What is the problem?

By any reasonable definition, there are too few women and minorities on the faculty at major research institutions.



What Causes the Problem?

Is it the available pool of candidates?

- Partly yes, but it does not fully account for outcomes for either race or gender.
- The situation differs across fields and departments.
- The impact of a reduced pool of candidates is greater for race than for gender.



What Causes the Problem?

Is it discrimination?

- It is tempting to believe that discrimination is a thing of the past, or is only practiced by a small set of ignorant people.



[Prospective Students](#)

[Current Students](#)

[Alumni, Parents
& Friends](#)

[Faculty & Staff](#)

[Corporate &
Government](#)

[Media](#)

[Contact Us](#)

[Search](#)

[Site Map](#)

[Make a Gift](#)

<http://engineeralum.berkeley.edu/>

The Faces of Berkeley Engineering

Meet Tomorrow's Leaders and Today's Pioneers

Students



Julia
Cross

Studies
the
martial art
Wu Shu



Kibibi
Moseley

Table
tennis
champion



Anthony
Levan-
dowski

Lego robot
creator



Werner
Goldsmith

Wrote the
book on
Impact



Ali
Niknejad

Circuit
Maven



Jennifer
Mankoff

Accomplished
viola
player



Oren
Jacob

Pixar
wizard



Julia
Gee

Volunteer-
aholic



Floyd
Kvamme

Chip guru

The Faces of Berkeley Engineering

Meet Tomorrow's Leaders and Today's Pioneers

Students



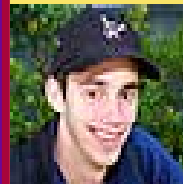
Julia Cross

Studies the martial art Wu Shu



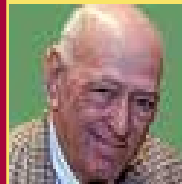
Kibibi Moseley

Table tennis champion



Anthony Levandowski

Lego robot creator



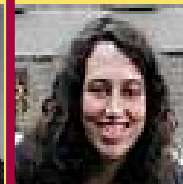
Werner Goldsmith

Wrote the book on Impact



Ali Niknejad

Circuit Maven



Jennifer Mankoff

Accomplished viola player



Oren Jacob

Pixar wizard



Julia Gee

Volunteer-aholic



Floyd Kvamme

Chip guru

“Discrimination” vs. Differential Perceptions

Maybe “discrimination” is only practiced by a small set of ignorant people, but...

Research shows that we all – regardless of gender or race – perceive and treat people based on their race/gender/social group, etc.

Valian (1998) *Why So Slow? The Advancement of Women*. Cambridge: MIT Press, p. 280



What are the obstacles to achieving diversity on the faculty?

Obstacles to Achieving Diversity

- Schemas
 - Gender
 - Race/ethnicity
 - Sexual orientation
 - Age, Ability, Other
- Lack of critical mass
- Biased evaluations and judgments
- Accumulation of disadvantage



Similar and Different Processes for Women and Minorities

Processes that produce outcomes for women and minorities are similar in some ways – and in other ways they are different.

It is important to consider carefully differences between gender and race/ethnicity, and their combined effects (e.g., for women of color).



Schemas: Non-conscious Hypotheses

Expectations or stereotypes associated with members of a group that guide perceptions and behaviors

- Schemas influence the judgments of group members as well as of non-group members.
- Gender and race schemas influence group members' expectations about how they will be judged.



Content of Schemas about Social Groups: Competence and Warmth

Fiske and colleagues demonstrated that schemas/stereotypes about different social groups vary along two dimensions:

Competence

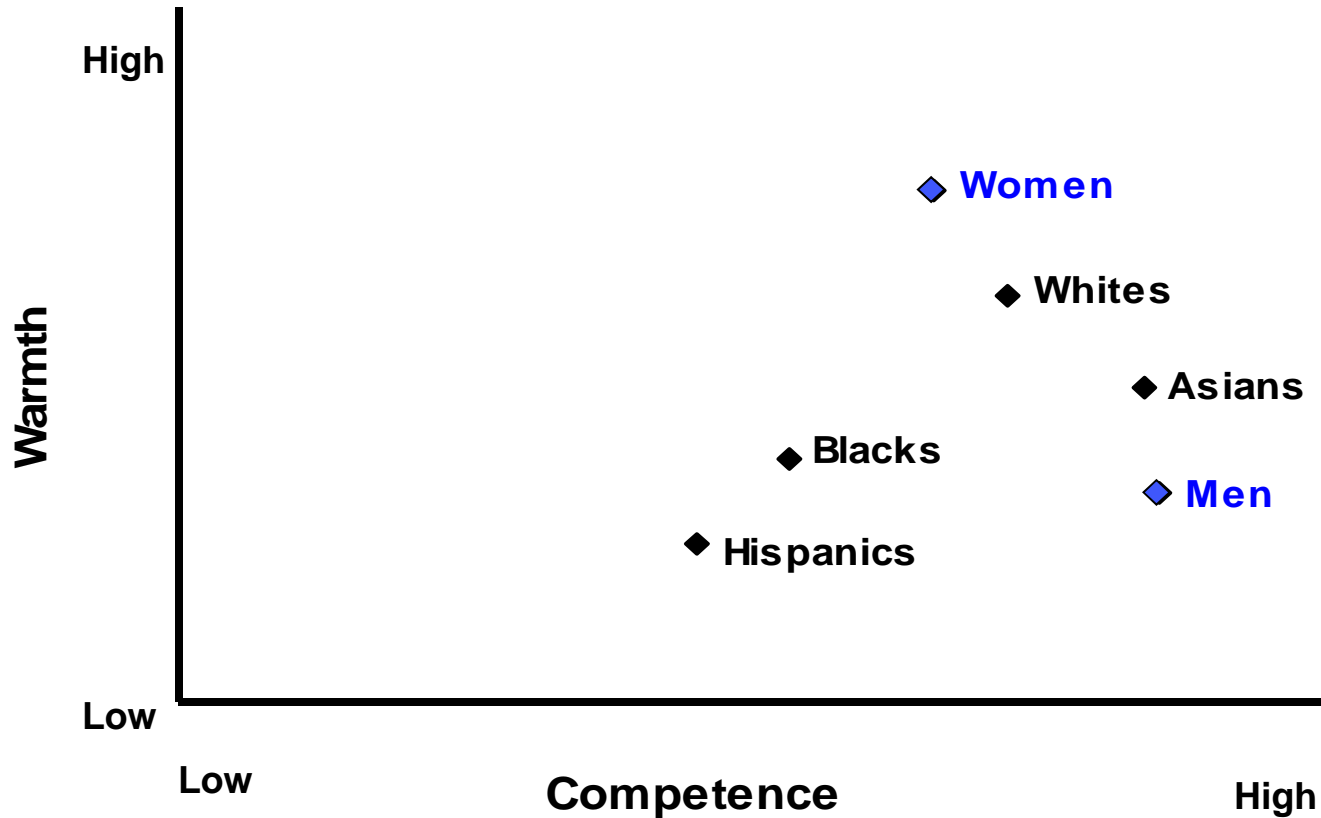
(e.g., skillful, competent, confident, capable, efficient, intelligent)

Warmth (e.g., friendly, well-intentioned, trustworthy, warm, good-natured, sincere)

Fiske, Cuddy, Glick, & Xu (2002). *Journal of Personality and Social Psychology*, 82(6), 878-902.



Analysis of Gender and Groups



Fiske, Cuddy, Glick, & Xu (2002). *Journal of Personality and Social Psychology*, 82(6), 878-902.



Schemas are...

- **Widely culturally shared**
 - Both men and women hold them about gender
 - Both whites and people of color hold them about race
 - People are often not aware of them
- **Applied more** under circumstances of:
 - Ambiguity (including lack of information)
 - Stress from competing tasks
 - Time pressure
 - Lack of critical mass

Fiske (2002). *Current Directions in Psychological Science*, 11, 123-128.



Schemas do...

- allow efficient, if sometimes inaccurate, processing of information.
- often conflict with consciously held or “explicit” attitudes.
- change based on experience/exposure.

Nosek, Banaji, & Greenwald (2002). *Group Dynamics: Theory, Research and Practice*, 6, 101-115.

Fiske, Cuddy, Glick, & Xu (2002). *Journal of Personality and Social Psychology*, 82(6), 878-902.



Schemas Affect Evaluation

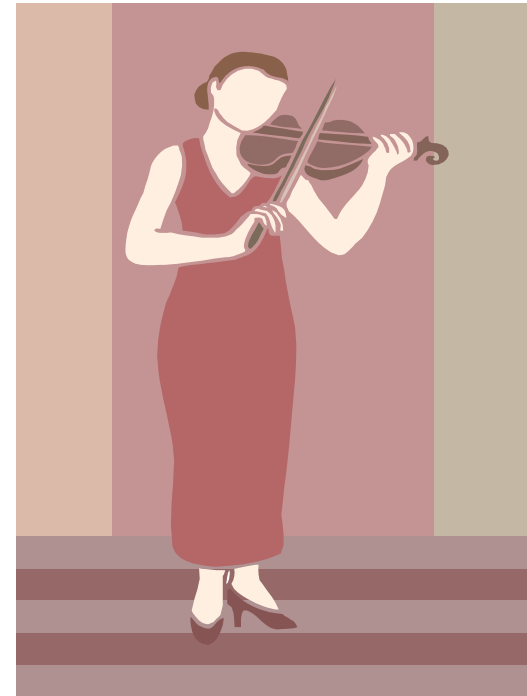
Numerous studies show that schemas affect evaluation, for example:

- Blind auditions
- Evaluation of CVs
- Evaluation of resumes
- Evaluation of job credentials
- Evaluation of minimum standards vs. ability
- Evaluation of fellowship applications
- Letters of recommendation



Blind Auditions: Gender

When auditioners were behind a screen, the percentage of female new hires for orchestral jobs increased 25 – 46%.

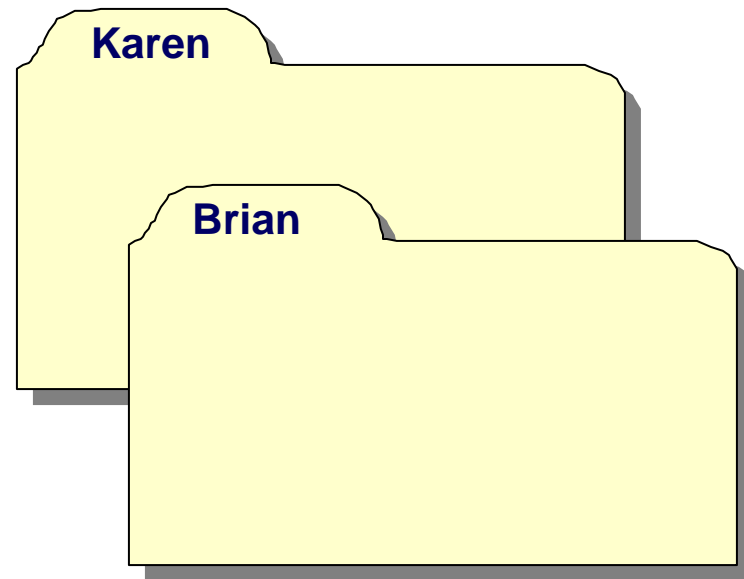


Goldin & Rouse (2000) *The American Economic Review*, 90, 4, 715-741.



Evaluation of Identical CVs: Gender

When evaluating identical application packages, male and female University psychology professors preferred 2:1 to hire “Brian” over “Karen.”

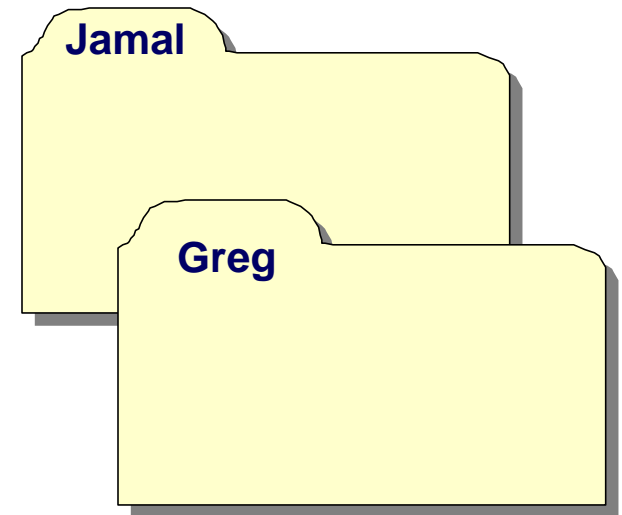


Steinpreis, Anders, & Ritzke (1999) *Sex Roles*, 41, 509.



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.
- The higher the resume quality, the higher the gap between callbacks for white and African American names.



Bertrand & Mullainathan (2004) *Poverty Action Lab*, 3, 1-27.



The Role of Ambiguity in Job Credentials: Race

- When credentials are equivalent, there are still differences based on ambiguity
- Race indicated via activities on resume
 - If ambiguous credentials, then Whites recommend
 - Black candidate 45% of the time
 - White candidate 76% of the time
- Whites get “benefit of the doubt” in ambiguous situations



Dovidio & Gaertner (2000). *Psychological Science*, 11, 315-319.



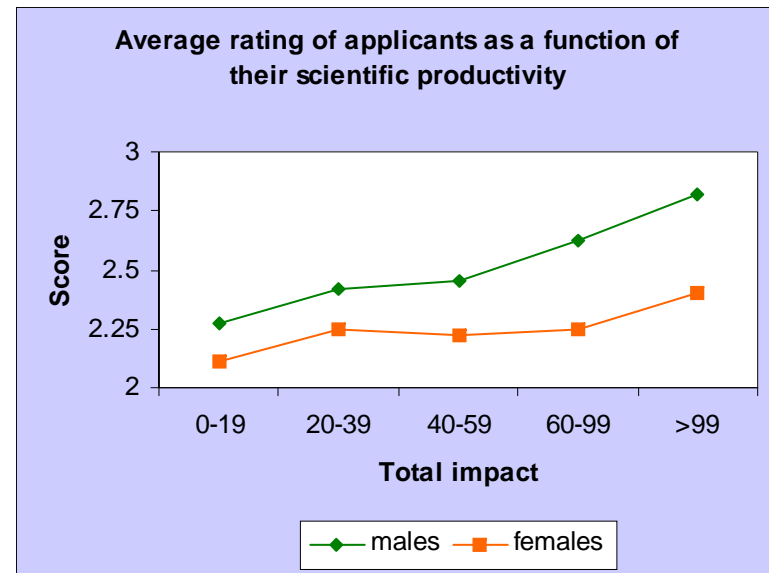
Evaluation of Fellowship Applications: Gender

“...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.”

Women applying for a post- doctoral fellowship had to be 2.5 times more productive to receive the same reviewer rating as the average male applicant.



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



Similar findings:

- USA/GAO report on *Peer Review in Federal Agency Grant Selection* (1994)
- *European Molecular Biology Organization Reports* (2001)
- NIH Pioneer Awards: *Journal of Women's Health* (2005) & *Nature* (August 2006)



Impact of Use of Different Standards on Evaluations: Race and Gender

- To be rated as having the **ability to be successful**
 - Women and African Americans are required to have significantly **higher** skills than Men and Whites and to have achieved **twice** as much
- To be rated as meeting **minimum standards for position**
 - Women and African Americans could be viewed as **less** capable than Men and Whites but **“good”** for a member of that group

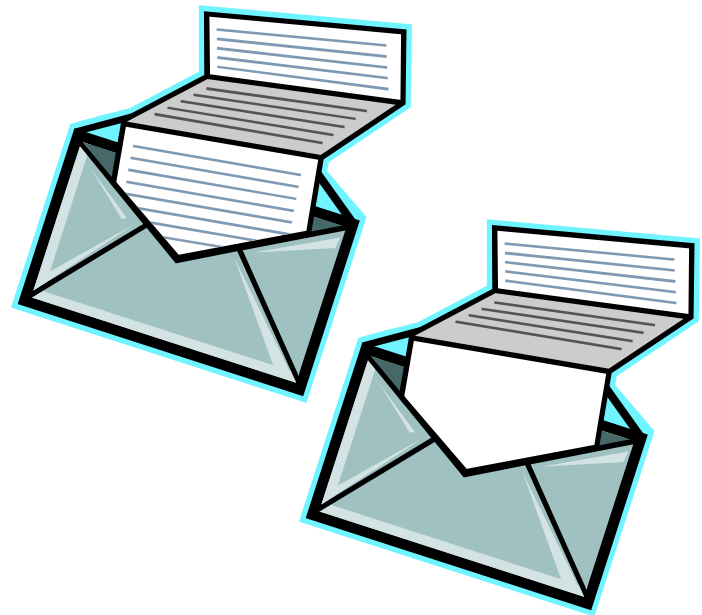
Biernat & Kobrynowicz (1997). *Journal of Personality and Social Psychology*, 72 (3), 544-557.



Letters of Recommendation: Gender

Letters of recommendation for successful male and female candidates for faculty positions in a medical school differed in ways that reflected gender schemas...

Trix & Psenka (2003) *Discourse & Society*, 14(2): 191-220, 2003.



Gender Schemas in 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.”

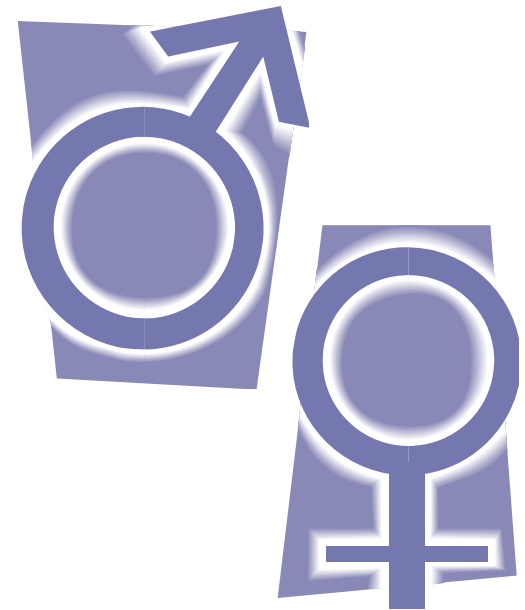


Trix & Psenka (2003) *Discourse & Society*, Vol 14(2): 191-220.



Unintended Impact of Schemas

- Gender and race schemas result in biased evaluations for members of both groups.
- These biased evaluations have important consequences that accumulate over time.



“Academe is a Meritocracy”

“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 age—that have nothing to do with the quality of the person or work being evaluated.”

The National Academies (2006). *Beyond Bias and Barriers*.



**How do schemas affect the careers
of women and under-represented
minorities?**

Leadership

- With single sex groups, observers identify the person at the head of the table as the leader.
- With mixed sex groups, a male seated at the head of the table is identified as the leader.
- A female seated at the head of the table is identified as the leader only half the time (and a male seated somewhere else is identified the other half).



Porter & Geis (1981) *Gender and nonverbal behavior*.



Leadership

Leadership for Asians in Academia

Asian/Asian American scientists are 4.1% of overall US workforce and 14.7% of U.S. life scientists

Within National Institutes of Health:

- 21.5% of NIH's tenure-track scientists but only 9.2% of NIH's tenured researchers

American Society for Biology and Molecular Biology

- None of the 26 council members and the 193 members of 11 standing committees.

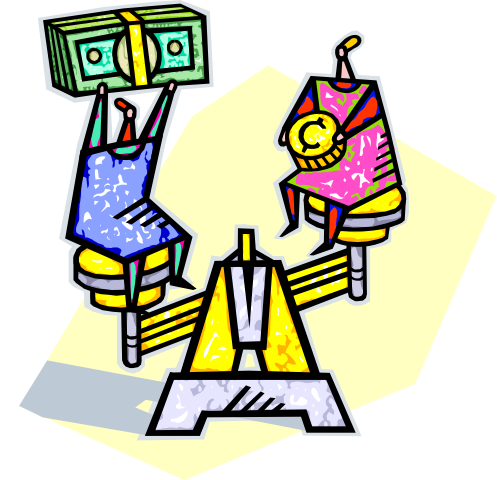


Mervis (2005). *Science*, 310, 606-607.



Accumulation of Advantage and Disadvantage

- Very small differences in treatment can, as they accumulate, have major consequences in salary, promotion, and prestige.
- “Mountains are molehills piled one on top of the other”



Cole & Singer. 1991. In Zuckerman, Cole, and Bruer, eds., *The Outer Circle: Women in the Scientific Community*. New York: W. W. Norton and Company.



Small Bias Has Large Effects

- Simulation of an organization's 8-level pyramidal hierarchy
 - Initially each level had equal numbers of men and women
 - Assume only **1%** bias in favor of promoting men and simulate promotions until complete turnover
- At the end, the highest level in the organization was **65%** male.



Martell, Lane, & Emrich (1996) *American Psychologist*, 51, 157-158.



Critical Mass Affects the Use of Schemas

When a group lacks critical mass, reliance on schemas is greater.

- *When there are many individuals, we differentiate among them and cannot rely on group-based schemas.*

There are few women and minorities on the faculty, so schemas are more likely to be invoked.



Example of a Contemporary Gender Schema that Can Produce Biased Outcomes



The New York Times Magazine

"The Opt-Out Revolution"



Recent Evidence Shows Women Today Are **NOT** Opting Out More

Recent data from two national sources show that:

- Recent graduates (those who graduated 10 years ago) are having babies even later in life
- 80% of college-educated women in their 30s are in the labor force
- Overwhelming majority of women with advanced degrees do not opt out if they have children

Boushey (2005). *Are women opting out? Debunking the myth*. Center for Economic Policy Research Briefing Paper; Goldin (2006). *Working It Out*. New York Times.



What is the potential impact of this gender schema?

...it creates an expectation that all women tend to “opt out” or have a desire to do so...therefore, female applicants and faculty must prove they are not going to “opt out” nor work less hard.

How often do your colleagues question whether a male student/recruit/colleague might want to spend too much time with his family?



Similar and Different Processes for Women and Minorities

Similarities for gender and race/ethnicity

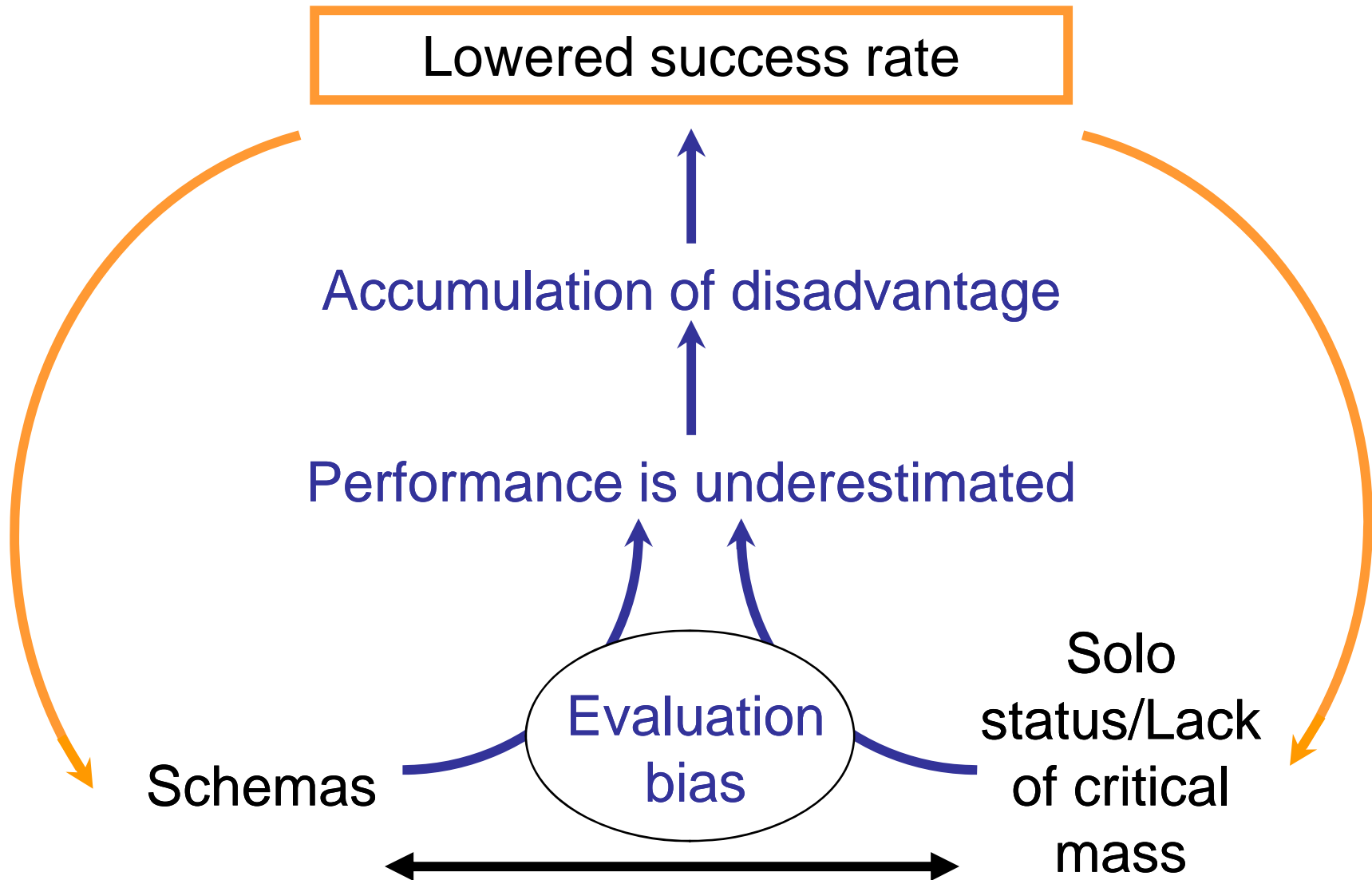
- Importance and impact of schemas
- Lack of critical mass leads to reliance on schemas
- Evaluation bias
- Accumulation of disadvantages

Differences between gender and race/ethnicity

- Content of schemas
- Likelihood of solo status
- Less full pipeline for underrepresented minorities than (white) women
- Added complexity for women of color



Self-reinforcing Cycle



Why has it been so difficult to overcome the obstacles?

Schemas, solo status, and lack of critical mass make differential outcomes seem “natural” or expected:

- who applies for jobs
- who is in jobs
- who receives awards
- who is promoted to leadership positions

Schemas, solo status, and lack of critical mass provide unconscious justification for the status quo (which lessens our likelihood of questioning it)



Schemas and Policies Assume Institutions Are White, Male, and Heterosexual

- Tendency to value people who fit in to traditional definitions of the discipline and of good work.
- Late and reactive implementation of family friendly policies.
- Social and professional networks.
- Concentration of white men at the top.
- Students' awkward, confused, or challenging reactions to female faculty and faculty of color.



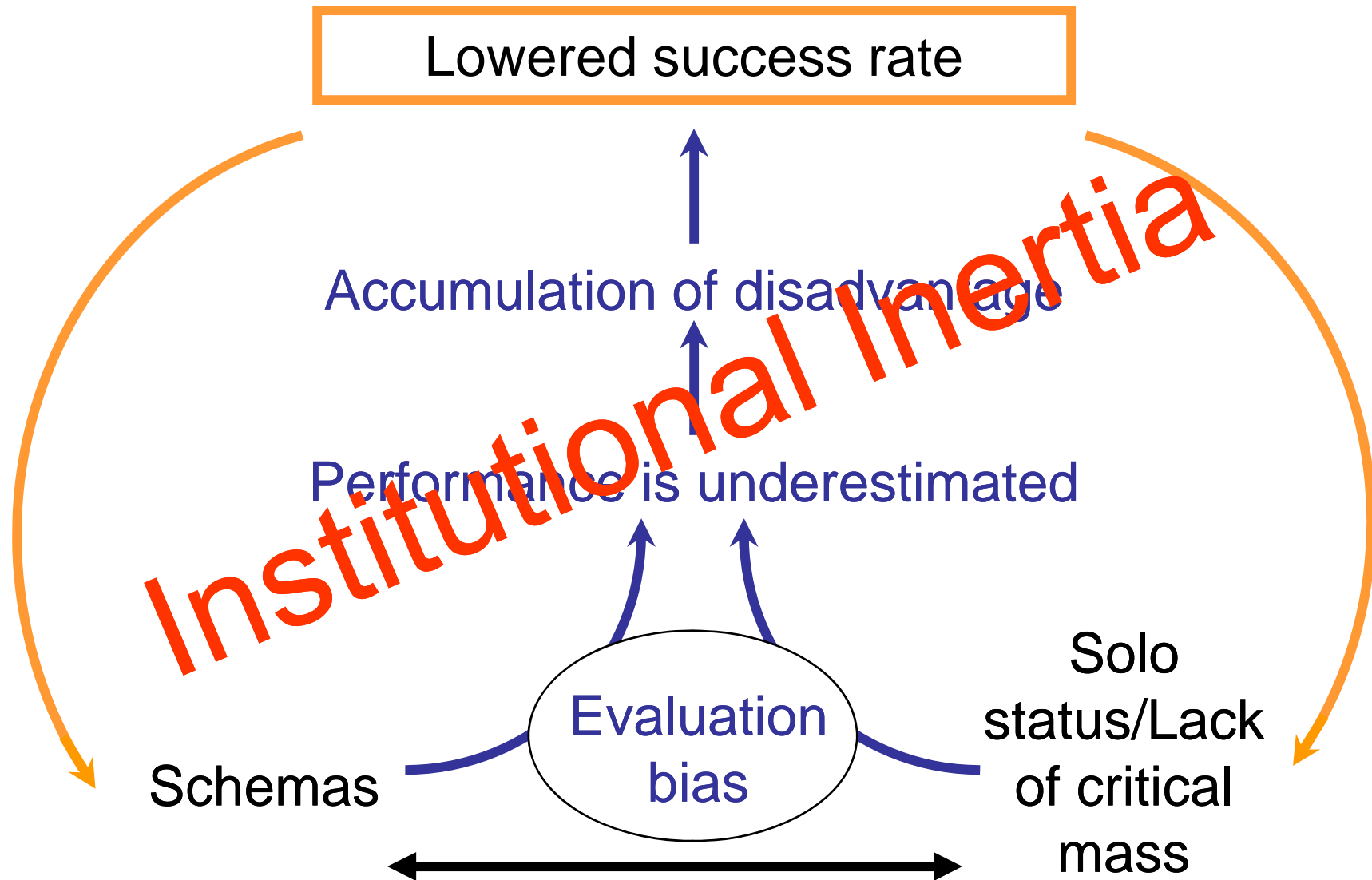
Routine Practice will Reproduce Institution

Without conscious effort, institutions tend to:

- reproduce themselves (“institutional inertia”).
- pose obstacles to success of individuals not “imagined” in the institutional self-definition.



Self-reinforcing Cycle



Implicit attitudes can lead to outcomes we do not want

- We pride ourselves on valuing merit and excellence, but we do not always recognize it.
- Implicit attitudes lead us to overestimate some people's merit and underestimate others'.
- We also value diversity, but we cannot achieve it if we do not do something about it.



A Diverse Faculty is Valuable Because...

As researchers: We seek excellence and diversity

- Retain over 60% of the population
- Gain valuable contribution of the whole population
- Support diverse teams, which produce better solutions

As teachers: We want the best for all of our students

- Present all of them with models
- Provide all of them diverse experiences

As citizens: We want to be fair and equitable

By excluding women and male minorities, we are excluding the majority of people from the pool.



Diversity Matters

- Opens up environment for a wider range of people, skills, talents, and perspectives.
- More perspectives are taken into account in devising solutions to problems.
- Fewer things are taken for granted; more things are questioned.



Break-out Session

Break-out Session

- Purpose of break-out session
 - To provide an opportunity to discuss scenarios and brainstorm strategies to minimize evaluation bias or other difficulties
- Logistics of break-out session
- Process of break-out session
 - Identify strategies to address scenarios
 - STRIDE members will take notes
 - Notes will be posted on the UM ADVANCE Web site
- After the break-out session, we will present the final section: strategies that address the under-representation of women and minorities in faculty recruitment.



What Can We Do?

Strategies for breaking the cycle

- Increase conscious awareness of bias and how bias can affect evaluation
 - Implicit Association Test:
<https://implicit.harvard.edu/implicit/>
- Increase critical mass
- Increase sustained interaction
- Develop more explicit criteria (less ambiguity)
- Alter institutional policies and practices

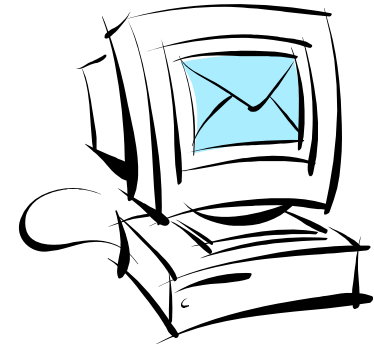
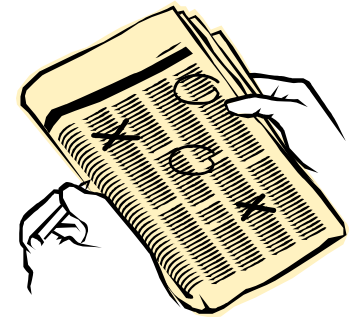


Recruiting Strategies

- Recruit for diversity and excellence

We're STRIDE, not STRID!

- Prime the pump
- Search committee composition
- Job definition
- Advertisement
- Active recruiting
- Interviewing tips
- Promote awareness of the issues



Prime the Pump

Particularly in the case of underrepresented minorities, recruitment begins before you have a position.

- Cultivate your own students as their careers advance
- Scan the field at professional meetings, in journals, *etc.* and invite young scholars early and often to visit, give talks, build collaborations



Search Committee Composition

- Include people who are committed to diversity and excellence.
- Include women and minorities.
 - Remember to take account of their added service load in other assignments
 - Remember the double impact on women of color



Job Description

- Consider implications of the job description: search as broadly as possible.
- Work with a single search committee for all positions, to allow opportunities for people with unusual backgrounds to emerge.



Advertisement

- Consider advertising in venues that reach women and minorities (special subgroups of professional organizations, focused conferences and workshops, *etc.*).
- Note in your ad that the university has resources to help deal with dual career issues.



Active Recruiting

- Actively seek candidates who contribute diversity and excellence: do not just wait for applications to come in.
- Ask colleagues for the names of top female and minority students, in addition to male students.
- Ask faculty who nominate candidates to identify other very strong candidates in the field, including women and minorities.



Active Recruiting (cont'd)

- Widen the range of institutions from which you recruit.
- Consider women and minorities who may currently be under-placed: those thriving at less well-ranked institutions.
- Invite female and minority speakers.



The Interview

- Bring in more than one female and/or minority candidate: this disproportionately increases the likelihood that a woman and/or minority will be hired.
- Provide information about dual career and family-leave policies to all candidates.



Rooney Rule

The “Rooney Rule” (adopted in 2002) penalizes National Football League teams for not interviewing minority candidates for each vacancy.

In the 27 months following this rule’s adoption, 4 of the 15 openings for head coach were filled by African American candidates.



The Interview

- Treat female and minority faculty applicants as scholars and researchers, **not as female or minority** scholars and researchers.
- Give the candidate an opportunity to talk with other women and minorities – **not the search committee and preferably not even in the same department** – about gender and climate issues.



Recruiting for Diversity and Excellence

- Be proactive
- Be committed
- Be aware
- Be creative
 - If you develop additional ways that are effective in increasing diversity and excellence, let us know so that we can spread the word!



Avoid Illegal and Discriminatory Questions

The UM Human Resources and Affirmative Action Web site includes a chart comparing legal and discriminatory questions about:

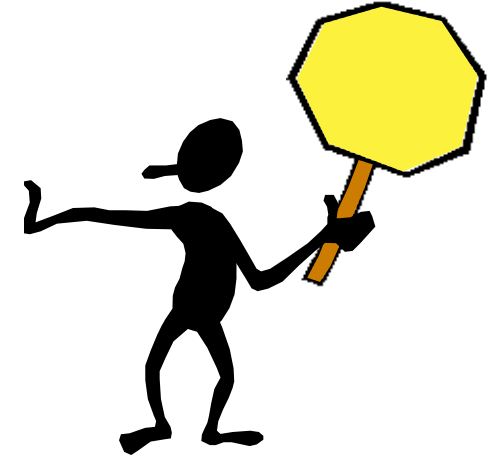
- Family status
- Race
- Religion
- Residence
- Sex
- Age
- Arrests or convictions
- Citizenship or nationality
- Disability

<http://www.umich.edu/~hrraa/empserv/deptinfo/legalchart.htm>



Be Aware of Evaluation Bias

- Remember the lesson of blind auditions in orchestras.
- Being aware of evaluation bias is a critical first step.



Coming today is an excellent start!

- Spread awareness to the others on the search committee.
- Evaluation bias can be counteracted.



Bauer and Baltes, 2002, *Sex Roles* 9/10, 465



Focus on Particular Criteria During Evaluation

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

- | | |
|---|--|
| <input type="checkbox"/> Read candidate's CV | <input type="checkbox"/> Met with candidate |
| <input type="checkbox"/> Read candidate's scholarship | <input type="checkbox"/> Attended lunch or dinner with candidate |
| <input type="checkbox"/> Read candidate's letters of recommendation | <input type="checkbox"/> Other (please explain): |
| <input type="checkbox"/> Attended candidate's job talk | |

Please comment on the candidate's scholarship as reflected in the job talk:

Please comment on the candidate's teaching ability as reflected in the job talk:

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						

Other comments?

Consider the Potential Importance of Personal Life in All Faculty Recruitment

- Many faculty have two-career households.
- Female faculty are more likely not to be partnered or to have a partner who is employed fulltime.
 - UM climate study (2001)
- Family friendly policies provide resources to help **both** male and female faculty manage households.



Provost's Dual Career Program

- Comprehensive Web site with dual career information
http://www.provost.umich.edu/programs/dual_career/index.html
- Link to HRAA's Web site for employment opportunities
<http://www.umich.edu/~hrra/empserv/dual/>
- Individual counseling and assistance for partners of tenured & tenure-track (T&TT) faculty members
- Financial support (in some cases)
Provost's Faculty Initiatives Program (PFIP) provides supplemental resources to help schools and colleges assist dual career partners of T&TT faculty



College Dual Career Program

- Process should begin early:
 - Distribute family friendly policy information to all candidates during first visit
 - Address family issues raised by candidate expeditiously
- University assistance:
 - Full time dual career staff available through chairs and deans (CoE, LSA, and MED; and Provost Office)
- Details of funding are case-by-case and are not shared with candidates or partners



Tips for Dual Career Situations

- Ensure everyone on the search committee is familiar with UM's dual career support programs.
- Ensure candidates know about diverse local employment possibilities available (e.g., provide dual career Web site).
- Identify someone with whom the candidate can have a confidential conversation about dual career issues.

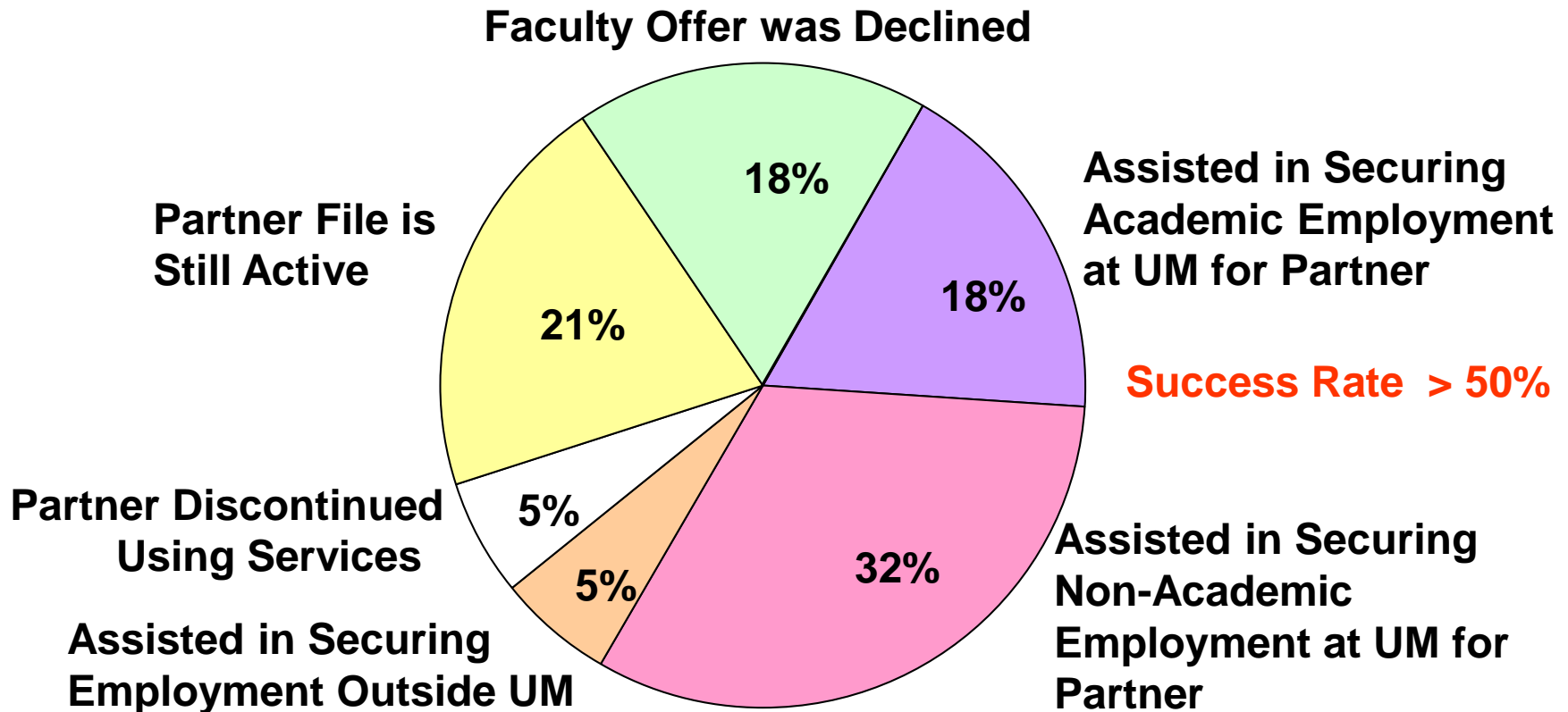


UM Dual Career Statistics

- Of the partners served by the Dual Career Program in CoE, LSA, and MED during the past 3 years, 40% were men and 60% were women.
 - The Dual Career Program provides services to domestic partners of faculty recruits regardless of marital status or sexual orientation.



Outcomes of One College's Use of Dual Career Assistance, AY2005



N = 34 (23 female and 11 male dual career partners)



Recruitment is the beginning!

- Successful recruiting to diversify the faculty must be reinforced by successful retention, which depends on the climate and institutional change.
- For more tips on creating a supportive climate for all faculty, see the UM ADVANCE Project handbook: <http://www.umich.edu/~advproj/handbook.pdf> or contact STRIDE at 647-9359.
- Contact the ADVANCE Office for copies or links to readings (advanceproject@umich.edu or 647-9359)



The Need for Mentoring

- 33% of exiting women and none of the men interviewed cited lack of mentoring as major factor leading to the exit decision
- 73% of all the women interviewed described:
 - situations where positive mentors advanced their careers
 - negative or indifferent mentors impeded their careers

Preston (2004). *Leaving Science*. New York: Russell Sage Foundation.



Early Strategies for Climate and Retention

- Provide help with networking and lab start-up
- Show an interest in other aspects of adjustment to life in Ann Arbor
- Introduce new faculty directly to colleagues
- Offer information about access to resources
- Invite new faculty to collaborate on departmental proposals
- Check that new faculty are being treated equitably
- Encourage inclusion of women and minorities in the academic life and decision-making of the department



Thank you for your
attention.

Good luck with your
recruitment and
retention efforts!

