



W I S E L I

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

Searching for Excellence & Diversity



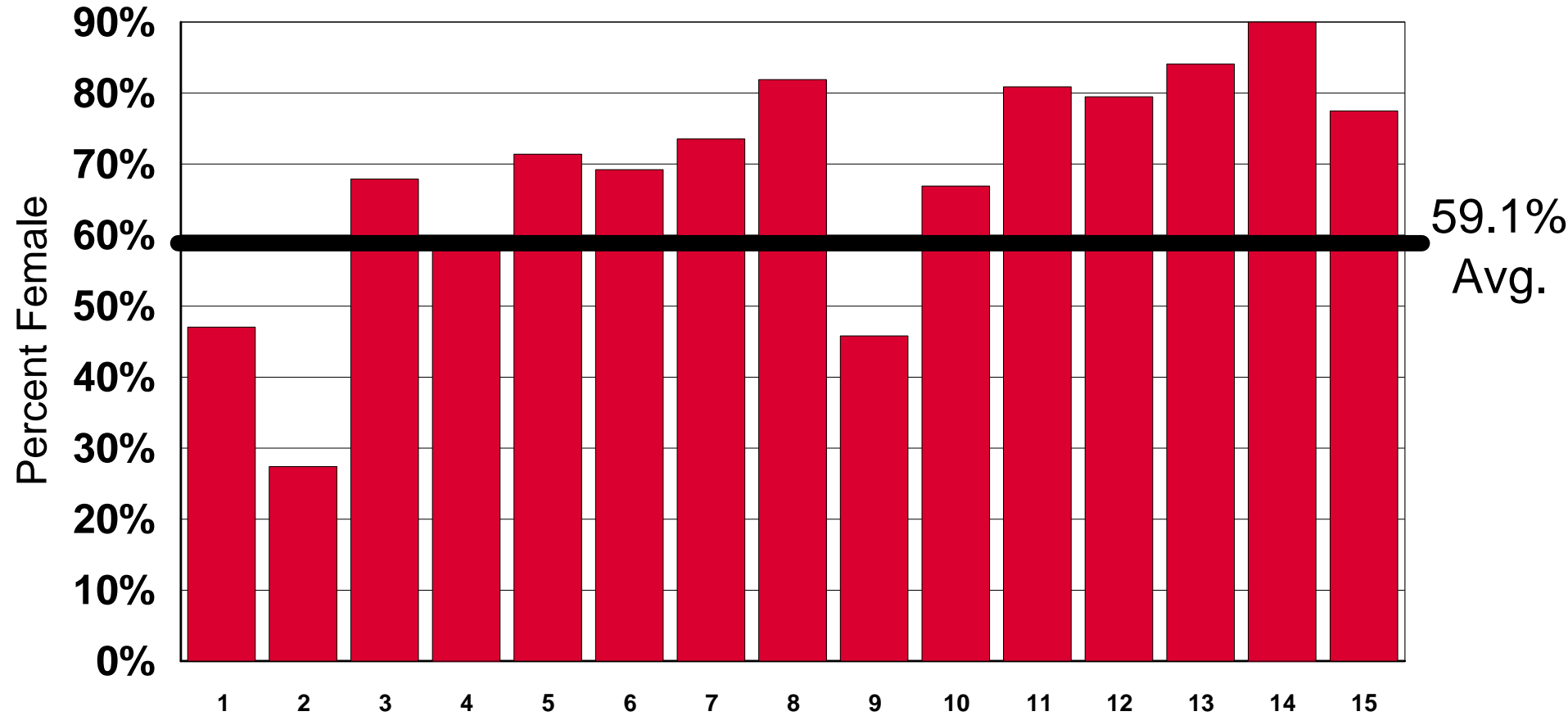
## Topics

---

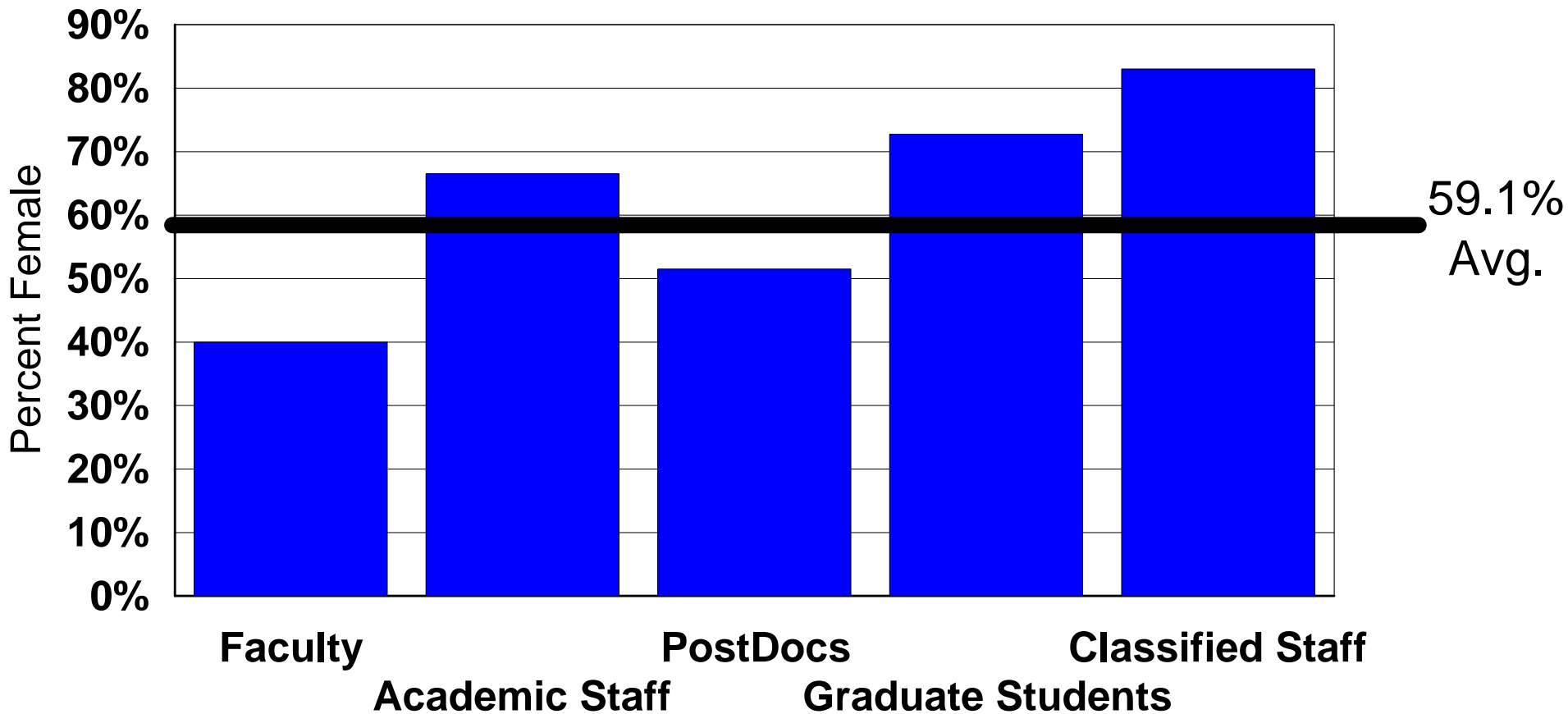
- Demographics of Waisman Center employees and potential hiring pools
- Recruiting an excellent & diverse pool of applicants
- The role of unconscious biases and assumptions in the evaluation of candidates
- Discussion of hiring practices within Waisman Center

# National Pool of PhD-level Scientists

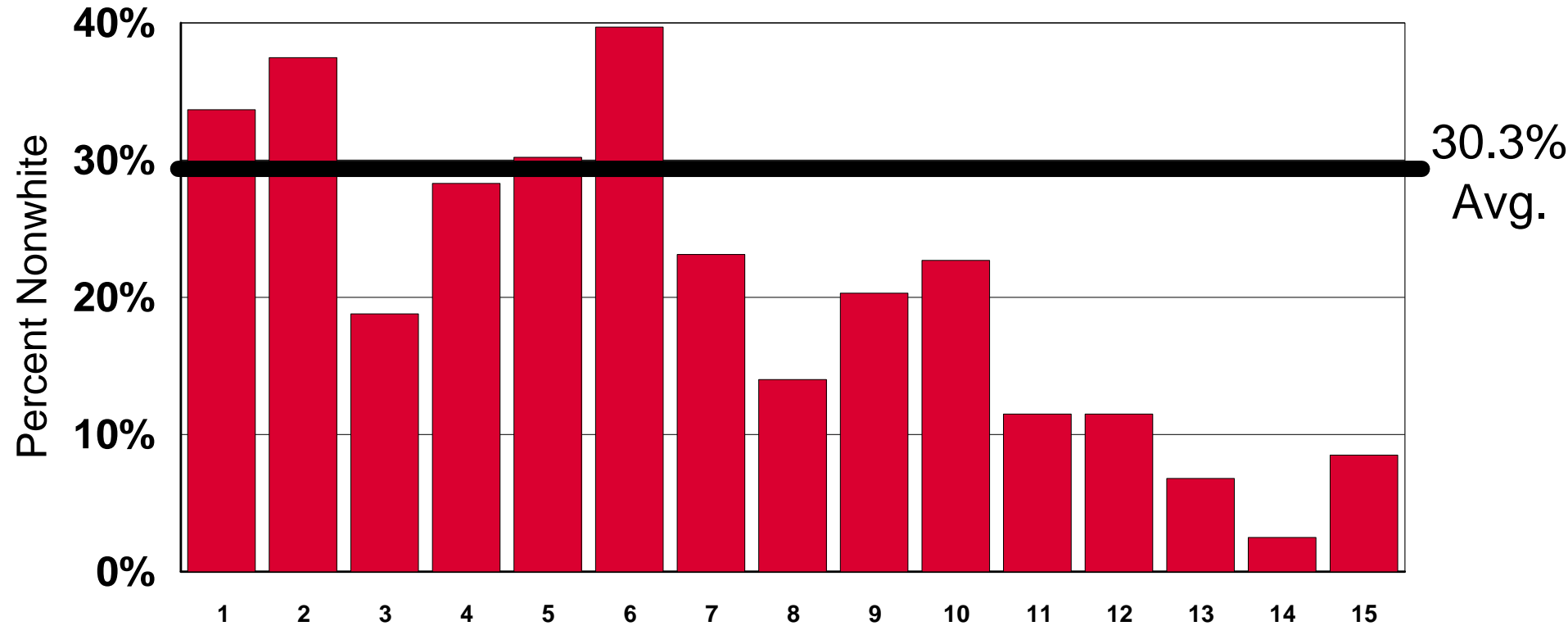
## Percent Female



# Waisman Center Employees and Affiliates Percent Female



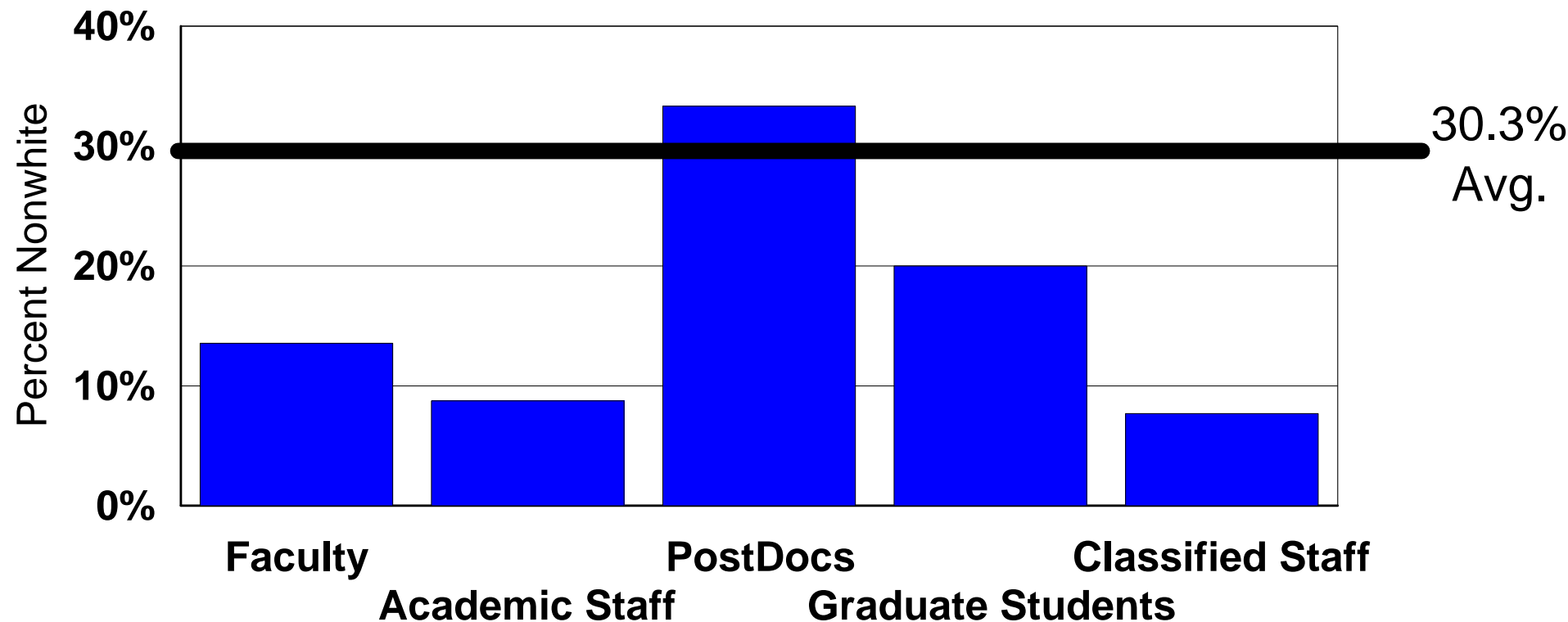
# National Pool of PhD-level Scientists Percent Nonwhite\*



\* Black, Asian, Hispanic, American Indian

# Waisman Center Employees and Affiliates

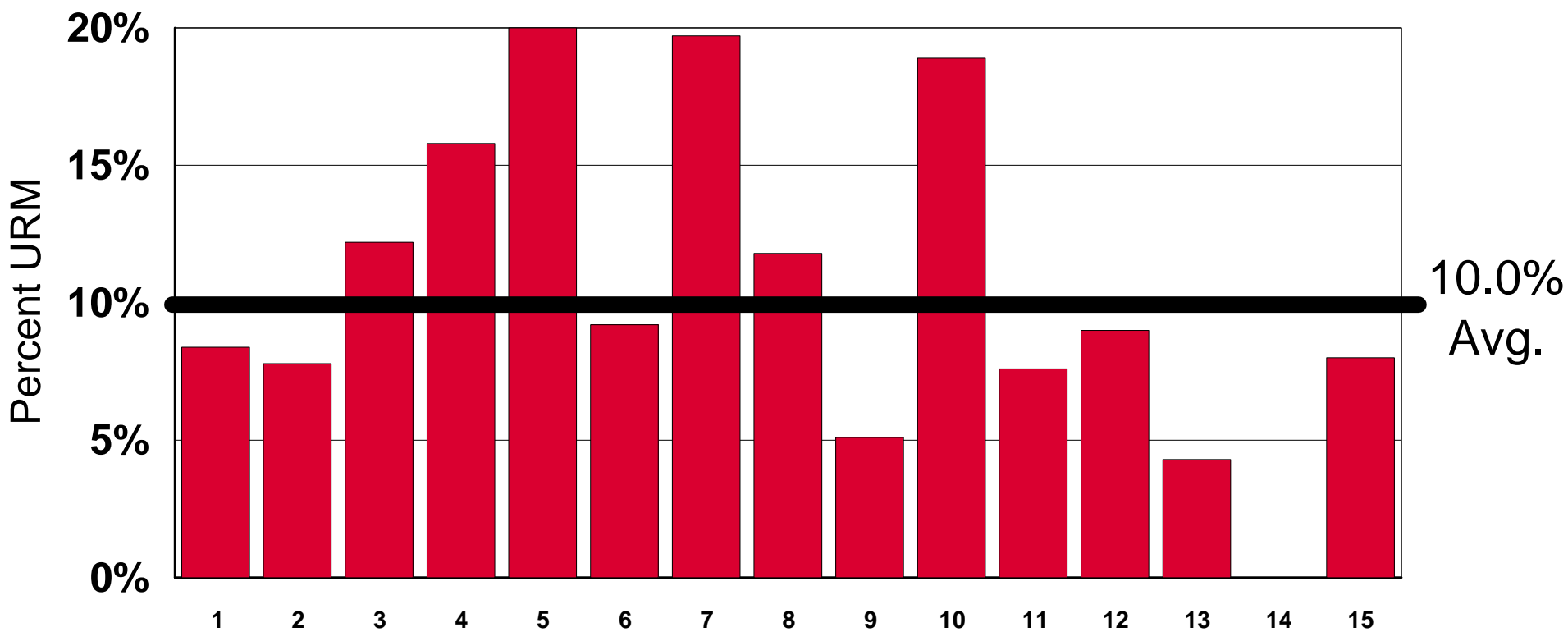
## Percent Nonwhite\*



\* Black, Asian, Hispanic, American Indian

# National Pool of PhD-level Scientists

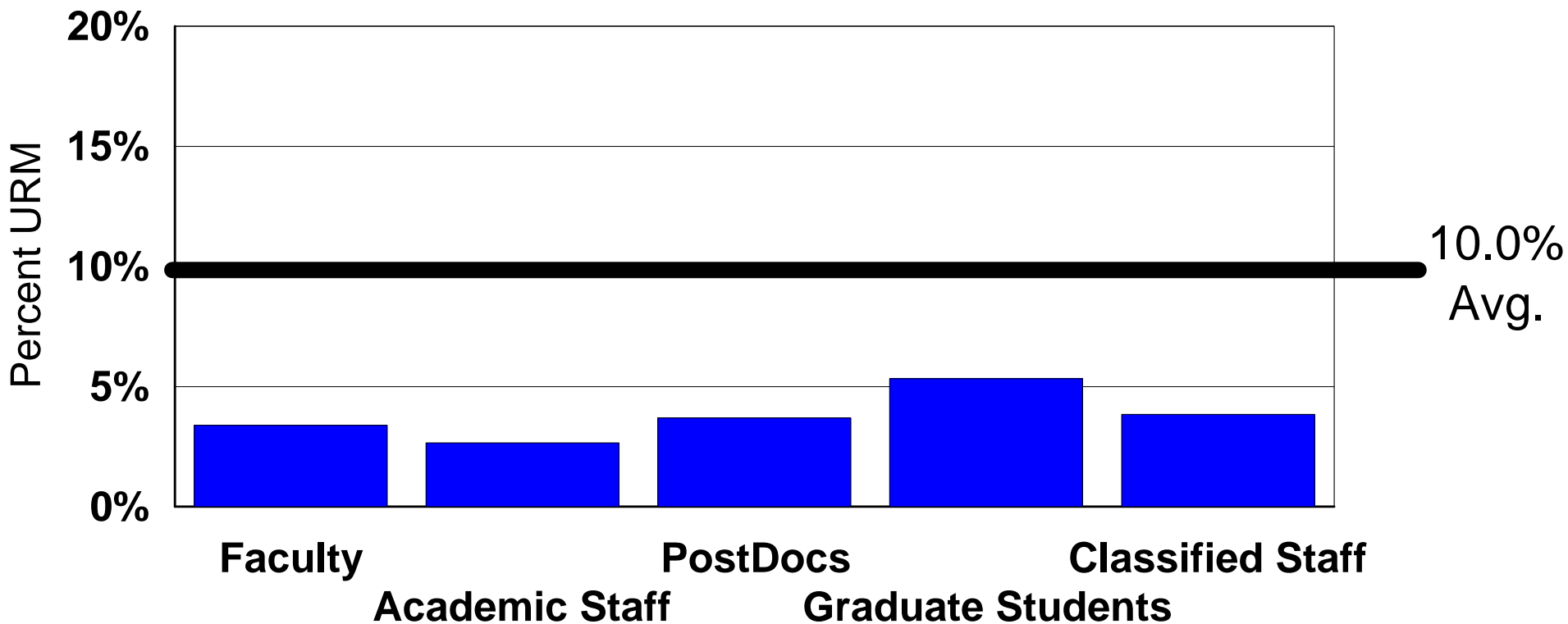
## Percent Under-represented Minorities\*



\* Black, Hispanic, American Indian



# Waisman Center Employees and Affiliates Percent Under-represented Minorities\*



\* Black, Hispanic, American Indian



# Recruiting an Excellent and Diverse Applicant Pool

1. Commitment to this goal is essential
2. Openly address issues of diversity and competently discuss reasons for its pursuit
3. Be prepared to address resistance to diversity.
4. Focus on the connection between Excellence and Diversity

# Recruiting Advice

1. Active vs. Passive Recruiting
2. Two types of Recruiting
  - a. Current – to fill an immediate need/opening
  - b. Long-term

# Recruiting for a current opening

- Language of the position description
- Campus Resources?
- Community Resources?
- Resources of Professional Organizations?
- Women/minority caucuses or subcommittees or listserves?
- Resources from WISELI's guidebook and supplement
  - Publications targeted to women/minorities
  - Fellowship programs

# Long term recruiting

- Inclusive Networking
- Departmental colloquia/seminar series/conferences
- Establishing ties w/ schools or colleges with a good record of producing underrepresented scholars
- Alumni groups
- Inclusive outreach to promising individuals

# The Role of Bias and Assumption in Evaluation

Review of some of the evidence

More at : <http://WISELI.engr.wisc.edu>

**A substantial body of evidence establishes that most people—men and women—hold implicit biases.**

**Decades of cognitive psychology research shows that**

- **Most of us intend to be fair and believe we are fair**
- **Most of us carry unconscious biases**
- **The three primary characteristics of individuals subject to bias or stereotypes are race/ethnicity, sex, and age**
- **these biases influence our evaluations of people and their work**



# What does the research say about bias and prejudice?

- **Blind, randomized trials**
  - o Give each group of evaluators pictures, words, or applications with a racial or gender indicator
  - o Isolate gender or ethnicity as sole variable
  - o Compare evaluations
- **Real life studies**

# Examples of Blind, Randomized Trials

- When shown photographs of people who are the same height, evaluators overestimated the heights of male subjects and underestimated the heights of female subjects.  
*Biernat et al., 1991;*
- When asked to rate the quality of verbal skills indicated by a short text, evaluators rated the skills lower if they were told an African American wrote the text than if a they were told a white person wrote it, and rated verbal skills higher when told that a woman wrote it than when told a man wrote it.  
*Biernat and Manis, 1995*

# Lessons to be Learned

- We often apply generalizations about groups to our evaluation of individuals
- The generalizations we apply may be accurate – eg. men, on average, are taller than women – but we can and do apply them inaccurately to individual members of a group
- We can apply generalizations that may not be accurate

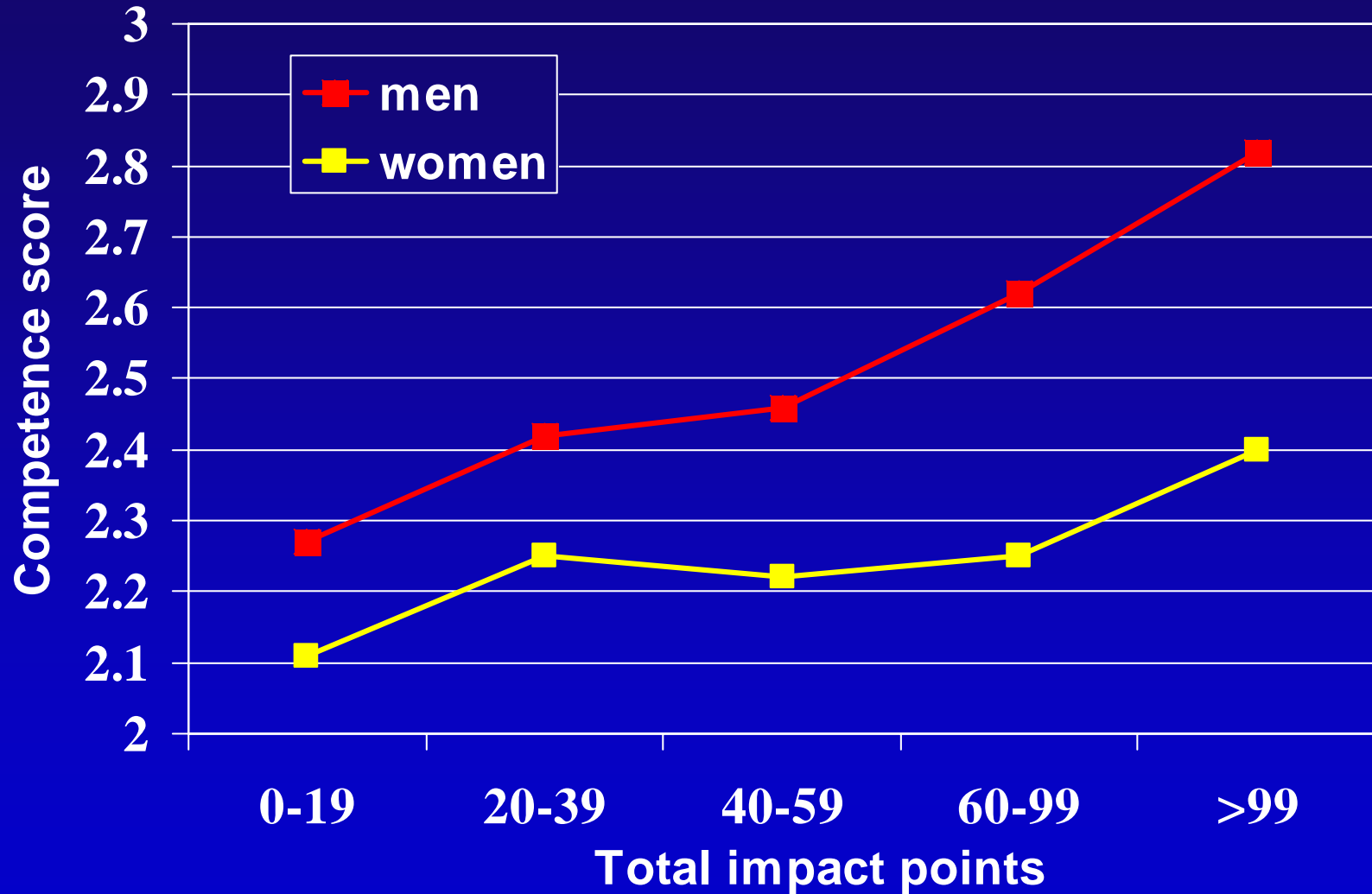
# Examples of Real Life Studies

## Swedish Postdoc Fellowship Study

*Wenneras and Wold, Nature, 1997*

- Reviewed 114 applications for prestigious research postdocs to Swedish MRC (52 women)
- Compared Reviewers' "competency rating" scores to a standardized metric derived from publication record (impact points)
- MRC reviewers consistently gave women lower competency ratings
- Males competency ratings increased with their publication record – women's competency rating did not
- To even the score, women needed equivalent of 3 extra papers in a prestigious journal like Science or Nature

# Wenneras and Wold, Nature, 1997



# Examples of Real Life Studies

- Curriculum vitae sent to 238 academic psychologists (118 male, 120 female)
- Randomly assigned male or female name to cv
- Academic psychologists gave cv's with male names attached higher evaluations for
  - Teaching
  - Research
  - Service Experience
- More comments on cvs with female name
- Evaluators were more likely to hire the male than the female applicant

*Steinpreis et al., Sex Roles 41: 509 1999*

# Examples of Real Life Studies

- 312 letters of recommendation for medical faculty successfully hired at large U.S. medical school
- Letters for women vs men:
  - Shorter
  - More letters for women with “*minimal assurance*”
  - More letters for women included “*doubt raisers*”
  - Men – “researchers” and “colleagues”
  - Women – “teachers” and “students”
  - Women – 4X more references to personal lives
  - Women - Fewer *standout adjectives* (“outstanding” “excellent”)

# Examples of Real Life Studies

- Resumes sent to a variety of employers advertising openings in local newspapers in Chicago and Boston
- Randomly assigned “white-sounding” or “African American-sounding” names to resumes
- Applicants with “white-sounding” names were more likely to be called back to interview for positions.

*Bertrand and Sendhill, 2004*



# Examples of Real Life Studies

- Students wearing baseball caps apply for retail positions in a local shopping mall – and ask to use the bathroom.
- Unknown to students – caps randomly labeled “Texan – and proud” or “Gay – and proud.”
- Students “identified” as “gay” reported being less confident about getting a position, being treated less friendly, and were more frequently not permitted to use the bathroom.

*Hebl, et al. 2002*

# Overcoming Bias and Assumptions

- Instructing evaluators to try to avoid prejudice/bias *Blair and Banajjeilman, 1996*
- Critical Mass *Heilman, 1980*
- Developing and prioritizing criteria prior to evaluation *Uhlmann and Cohen, 2005*
- Time and Attention given to evaluation *Martell, 1991*
- Type of Decision-making used *Hugenberg et al., 2006*

# References

All references listed on the brochure:

“*Reviewing Applicants: Research on Bias and Assumptions*”

and on

<http://wiseli.engr.wisc.edu/initiatives/hiring/BrochureReferences.pdf>

Except for:

Blair, Irene and Mahzarin Banaji. “Automatic and Controlled Processes in Stereotype Priming.” *J. Pers. & Soc. Psych.* 70 (1996): 1142-1163.

Hebl, Michelle et al. “Formal and Interperson Discrimination: A Field Study of Bias toward Homosexual Applicants.” *Pers. & Soc. Psych. Bull.* 28(2002):815-825.

Hugenberg, Kurt et al. “Framing Discrimination Effects of Inclusion Versus Exclusion Mind-Sets on Stereotypic Judgments.” *J. Pers. & Soc. Psych.* 91(2006)1020-1031.





# Workshops

---

- Running an effective and efficient search committee
  - Choosing your search committee members
  - Writing the PD/PVL
  - Getting the most out of committee members
  - Wisconsin laws
- Discussing diversity with your search committee
- Tips for evaluating dossiers in large applicant pools
- The interview process
- “Closing the deal”



# Current search practices in the Waisman Center

---

- Search committees? Which positions?
- Training for search committee chairs/members?
- How might information on bias & assumptions reach committee members, or hiring authority?
- Workshops, individual visits, other methods to reach committees?



W I S E L I

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