Implicit Bias Workshop
Tenured Women Evolution 2014

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Mission

AWIS is a national advocacy organization championing the interests of women in science, technology, engineering, and mathematics (STEM) across all disciplines and employment sectors. Founded in 1971, AWIS is the only all-inclusive multi-disciplinary membership organization for women in STEM.
AWIS Represents Women in All Sectors of Science

**Field**
- Life Sciences: 64%
- Physical Sciences: 3%
- Engineering: 18%
- Math & Computer Science: 18%
- Social Sciences: 9%
- Other: 3%

**Employment Sector**
- Academia: 51%
- Industry: 29%
- Government: 7%
- Non Profit: 10%
- K-12 Education: 1%
- Other: 2%
AWIS has a broad reach

- 50 chapters engage members in outreach, professional development, and advocacy

- Based in DC, we are active on Capital Hill (America Competes Act, Paycheck Fairness Act) and work with government agencies (NIH, NSF, Department of Justice)

- We offer workshops and STEMinars on work-life balance

- We are working with scientific societies to examine their practices that may disadvantage women
Who are you?
Who are you?

- Museum
- 4-year college
- Master's
- Doctoral
Who are you?

- 7 department chairs
- 3 associate deans
- 4 grad program directors
You do a LOT of service

- 19 served on P&T committees, 5 as chair
- 34 served on faculty search committees, 8 as chair
- 18 served on curriculum committees, 7 as chair
You do a LOT of service

N of committees in most recent year

- more than 5: 0
- 3-5
- 1-2
Most of you have women colleagues

![Bar chart showing the number of women faculty in your department, categorized by tenure status and number.](chart.png)
The Implicit Association Test (IAT)

• Developed by psychologists and extensively tested
• Asks you to react to images/words
• Times your reaction
• Tests examine reactions to race, gender, age, political persuasion, et al.
• Gives a good indication of hidden biases we all have
• The results can be discomfiting!
What is implicit bias?

Unequal access to resources, prestige, recognition, etc. that results from unconscious devaluation of individuals according to a group with which they are associated.

Implicit bias produces outcomes "microinequities" that can be at variance with our values.
What is implicit bias?

Implicit bias operates in virtually every arena of our society: education, healthcare, business, penal system, entertainment ...

Implicit bias disadvantages women, non-whites, the elderly, those with visible disabilities: it is the polar opposite of privilege

kirwaninstitute.osu.edu/implicit-bias-review/
Implicit bias against women

- Operates in our daily lives
- Valian developed the concept of gender schemas
  - Unconscious perspectives about males and females held by both men and women
  - Formed from our experience
  - Causes us to underestimate heights for women and overestimate heights for men
  - Also causes us (all of us) to devalue women’s contributions in professional spheres

Valian, V. 1998 Why so slow?
AAUW. 2010 Why so few?
Implicit bias in the news

Nicholas Kristof commentary: Unconscious biases shape our world

Saturday June 14, 2014 4:04 AM

Here's a riddle: Why would a Hurricane Alexandra be deadlier than an identical Hurricane Alexander?

Everyone suffers from "unconscious bias," favoring certain kinds of people based on their upbringing, experience, and values.

You may prefer to hire people who were graduates of your alma mater, for example, or date someone with a similar family background as you.

Although hidden bias is common, it can affect hiring, promotions, evaluations, and dismissals, which is extremely harmful for companies trying to grow and diversify.
An example of a microinequity in a university

PeopleSoft database at a large research university
- Includes a field for title prefixes
- Human Resource staff enter data into PeopleSoft for new hires
- There are 7 pre-defined options for the title prefix

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Prefixes assigned to faculty

What kinds of microinequities have you noticed? 1/2 Your Input

• How students talk to a female vs. male faculty member. For. Ex., it is the female faculty member who is often called Mrs. X

• How staff refer to male faculty members as Dr. and female faculty members by their first name.

• Being told to not hyphenate my name when in graduate school, because then I would less likely be cited

• Possessing a foreign sounding name that others are less likely to use in a presentation, or remember, thus reducing the probability of your research being cited.
What kinds of microinequities have you noticed?

2/2 Your Input

- Undermined, or somehow treated in a different (negative) way because of their gender or race (or some other intrinsic characteristic)

- Women are interrupted more often

- Women offer ideas, and they are repeated shortly thereafter by a man

- Students seek out and share their personal lives more readily with women faculty
An important arena: Scientific Publishing

Authorship in *Behavioural Ecology* before and after double-blind review

![Graph showing change in first authorship percentage for Women, Men, and unknown gender. Women show a significant increase, Men show a decrease, and unknown gender shows a small increase.]

TREE 23: 4-6
Authorship of Scientific Papers


GENDER AND RESEARCH OUTPUT
The research output of most places is dominated by male authors (blue). Places where there is greatest gender parity in output (white) are often formerly communist states. Female dominance tends to occur in countries (orange) with lower research output.

Vermont, Rhode Island, Maine, Manitoba, Nova Scotia and Quebec top the North American gender parity charts.

Turkmenistan had only 52 papers with gender assigned published in 2008–12.

Women dominate science output in Macedonia, Sri Lanka, Latvia, Ukraine, and Bosnia and Herzegovina.
Citation rates

LEAD-AUTHOR GENDER AND CITATION

Papers with female authors in key positions are cited less than those with male authors in key positions, be they papers with one author, or those resulting from national or international collaborations.

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<tr>
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<th>Female author</th>
<th>Male author</th>
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Average of relative citations

0  0.2  0.4  0.6  0.8  1.0  1.2  1.4
Yet women contribute to better science!

NCEAS working group composition and impact of publications

Can we counteract implicit bias?

Absolutely!!

- Allow sufficient time to make measured decisions
- Clarify criteria, standards as much as possible
- Talk about its effects at every meeting where it might operate
- Prime yourself before situations where bias may operate
The years after tenure: special challenges ½ Your Input

- Change reviewing policies of journals – institute double blind approach
- 1st 7 years of NCEAS all working groups were all male – need to advocate that centers and institutes are active in promoting equity from day1
- Lack of senior females as mentors or sponsors
- Sex ratio begins 50-50 but then is male biased as we move up the ladder in academia
- Is there a lower criteria for males for promotion than females owing to implicit biases?
- Discern what is Important from and what is Urgent
The years after tenure: special challenges 2/2

Your Input

• Collaborative efforts by females are undervalued
• How to combat “learned helplessness” or strategic incompetence of colleagues
• Failure to support one another for awards and recognition
• As we age students respond differently to us
• Research commitment can vary
• Easy to put off planning for next promotion
• Have a 5 year and 10 year plan, make active choices
• Take your earned sabbatical ASAP!
The years after tenure

• Service demands ramp up
• Formal mentoring programs often stop
• The road to Professor is poorly lit and full of potholes
• As we age, students respond differently to us
  • We are expected to do more “emotional labor”
  • Students show disrespect more often
The years after tenure

- Commitment to research can waiver
- It is easy to put off planning for the next promotion
- Burnout is all too common
- Women in particular may face inappropriate requests for service / administrative work
- Women may be overlooked for leadership opportunities
The years after tenure

• Climate surveys show that Associate Professors are the least happy group of faculty

• Gender gaps in promotion to Professor are common
  • Percentage who are promoted
  • Length of time as Associate Professor
  • Some women are reluctant to put themselves through another onerous process
The years after tenure

Recognition and awards are highly gendered

Cadwalader, E et al. 2014. Advances in Gender Research (in press)
Let’s develop some strategies!

- The service trap
- Lack of mentoring/ sponsorship
- Lack of recognition
- Burnout

YOUR RESPONSES NOTED IN SUMMARY DOCUMENT
THANK YOU FOR PARTICIPATING!
Stay in touch

• We are trying to mount a website to post content and allow for discussions – watch your email for further developments!

• We are developing a proposal to the NSF ADVANCE program to help evolution societies move towards gender equity

• Please consider joining AWIS, which is in the vanguard of these issues
AWIS
ASSOCIATION FOR WOMEN IN SCIENCE
YOUR NETWORK, YOUR RESOURCE, YOUR VOICE

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