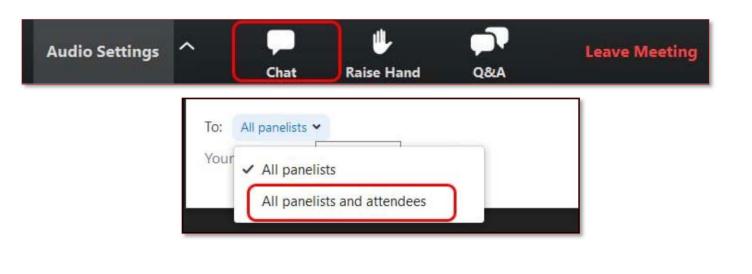
- Participants are muted by default
- Only the hosts/panelists can share their screens and webcams.
- You will only see the hosts/panelists –

not other participants.



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UNINTENDED AND HIDDEN BIASES: INFLUENCES OVER FACULTY EVALUATION PRACTICE & PROCESSES

BETH MITCHNECK PROFESSOR EMERITA UNIVERSITY OF ARIZONA SEPTEMBER 15, 2021



#### IDENTIFYING (HIDDEN) BIASES IN FACULTY EVALUATION What does the research suggest?

USING RESEARCH FINDINGS TO EMPOWER FACULTY TO CONDUCT EQUITABLE EVALUATIONS Tools to minimize hidden biases & conduct equitable faculty evaluation

Q and A



- Faculty evaluation is a continual process not a set of discrete formal evaluative events
- Research suggests that measurable gender & racial biases or inequities exist, in key areas of evaluation of faculty activity
- Urgency for more equitable review procedures
- Relatively simple changes to process & practice enhance equity & inclusion in faculty evaluation

## WHAT IS AN EQUITABLE EVALUATION?

1. **RECOGNIZE & ADDRESS** POTENTIALLY NEGATIVE IMPACTS OF POSSIBLE BIASES ON THE WAY THAT WE ASSESS PERFORMANCE AND QUALITY OF OUR WORK

2. EVIDENCE-BASED, SYSTEM AWARE, INTENTIONAL & INCLUSIVE

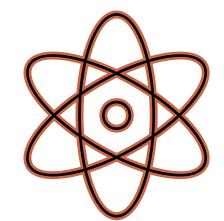
# WHERE ARE POTENTIAL HIDDEN BIASES & INEQUITIES WHEN EVALUATING FACULTY?

#### ✓TEACHING EVALUATIONS

✓ SERVICE TYPES AND ROLES

✓ PEER REVIEW

- LETTERS OF REFERENCE
- PANEL & JOURNAL REVIEWS
- RESEARCH METRICS
- CITATIONS AND PUBLICATIONS



## **Hidden Biases in Faculty Evaluation**

<u>Men and women</u> both often display implicit biases

Moss-Racusin et al. 2012; Bertrand & Mullainathan 2004; Steinpreis et al. 1999

Unconscious, implicit biases affect evaluative processes

 <u>Operate below the conscious level</u> – embedded stereotypes, attitudes, expectations <u>https://implicit.harvard.edu/implicit/faqs.html#faq1</u>

<u>Intersectionality</u> intensifies perceived/measurable biases

 Gender, race, ethnicity, degree granting institution, discipline or research topic, country of origin, speech patterns





LEARNING



- Measurable gender & racial differences
  - Descriptors
  - Across disciplines & countries
  - Online teaching
  - Mitigation

## SERVICE TYPES AND ROLES

- (In)visibility
- Committee chairs
- Leadership & recognition
- Volunteerism
- Cultural/gender taxation





## Changing Power Positions & Processes Do Influence Outcomes

### Committee chairs Editorial boards

- Review of 9,000 editors and 43,000 reviewers Helmer et al. (2017) Review panels
- Heising-Simons Foundation's postdoctoral fellowship program changes practices to achieve DEI goals Yen 2019

#### Dear Rhodes Scholarship Selection Committee,

It is my pleasure and honor to recommend Thomas Schriver for the Rhodes Scholarship. I have known Thomas for 2 years and was delighted to serve as his professor in my History course on Taiwan Politics and Cross-Strait Relations, as well as his graduation thesis adviser at the University of Minepota. After reading through the criteria of the Rhode Scholarship, I strongly believe that you Thomas.

The Rhodes True takes for students who possess exceptional scholastic abilities, as well as the drive to use those abilities to their full potential. Since I have known him, Thomas has demonstrated his superior intellect and thirst to understand the culture and consciousness of his fellow man on multiple occasions. In particular, his graduation thesis – discussing the complexities of Taiwan's history and how it has influenced the development of modern Taiwanese identity – was culturally-sensitive and contained remarkable analysis that was eye-opening even for an experienced professor in the field such as myself.

On a personal level, Thomas is a young man of strong character who fully embodies all the traits you look for in potential candidates. Specifically, I was astounded by his kindness, selflessness, and devotion to helping the less fortunate in any way he can. Every summer vacation, instead of using his free time for himself, he would travel to Indonesia to do volunteer work teaching English to children living in rural villages.

## LETTERS OF REFERENCE

#### Peer review

- Measurable gender & racial differences
  - Length
  - Descriptors
  - Across discipline

#### Address

I am writing in recommendation of XXX for the National Scholars Scholarship award that now being offered. I have worked with Ms. Smith for the past four years while the been a student of mine.

It has been a wonderful experience having Ms. Smith in my classes, as she is a hard working and encouraging student. She actually works with other students to help and encourage them in their studies as well.

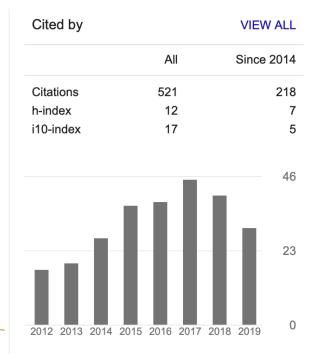
Ms. XXX has pursued a number of different aspects when it comes to her education and she has been financially responsible for her education thus far.

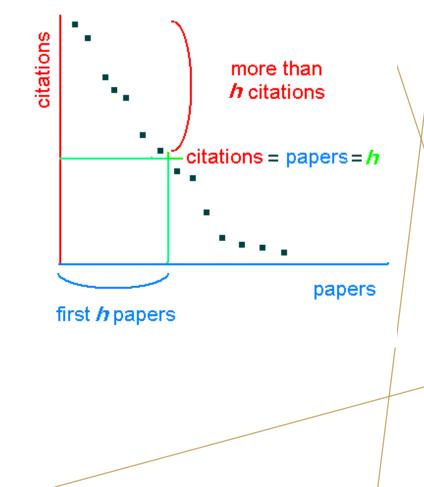
I believe wholeheartedly that she is going to be the perfect candidate for your scholarship and highly recommend her as so.

#### Peer review

## EVALUATION OF RESEARCH

- Citation metrics "measure" scholarly merit and productivity?
- Role of gaming and manipulation
- Algorithms tied to human
  practice (Noble 2018)

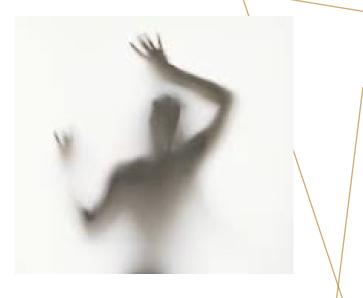




Peer review

### GENDER, INTERSECTIONALITY & CITATION PRACTICE: VALUING KNOWLEDGE PRODUCTION THROUGH CITATION

- Nearly 3/4 of those we cite, we know (Milard (2014))
  - Role of academic, personal, research networks
- Citation practice varies by characteristics:
  - <u>Individual</u>: the person doing the citing and the person (or people) being cited
    - rank, discipline, institution, gender, reputation, race, nationality, network centrality, career age.....
  - <u>Research</u>:
    - Discipline, subdiscipline, interdisciplinary, publication journal, collaborative, research networks





## ARE HIDDEN GENDER BIASES PRESENT IN SCIENTIFIC CITATION PRACTICE?

#### YES!

- Across time and disciplines, published papers with a woman as the first author have fewer citations than those where the first author is male. Lariviere et al. 2013
- Papers with mixed gender co-authors cited less than if only male authors
   Beaudry & Lariviere 2016
- More likely to cite people close to our own social networks Milard and Tanguy 2018

#### N O !

- Papers classified as female or male led in flagship & regional journals find gender parity in rate of citation in social science journals (econ, poli sci, soc) Lynn et al. 2019
- Analysis of top 10% of cited papers in management research show gender parity Nielson 2017

## DO RACIAL OR ETHNIC BIASES SHAPE SCIENTIFIC CITATION PRACTICE?

#### YES!

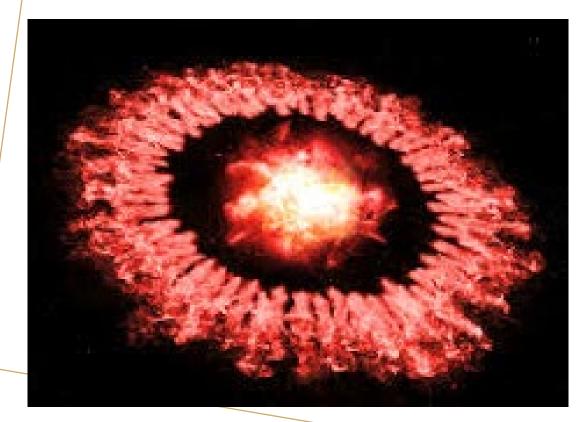
- Lived experience and inference
- Co-authorship networks: found to be segregated by ethnicity & nationality
  - Freeman & Huang 2015
- Citation practice is network dependent
  - Men & women faculty of color often left out of formal networks, homophily
- Peer review process & unprofessional reviews slowing publication rates from scientists of color (Silbiger & Stubler 2019)

- Responses to perceived exclusion
- <u>https://www.citeblackwomencollective.or</u>
  <u>g</u>
- <u>https://citeasista.com</u>
- #citeherwork



### DISRUPT IMPACTS OF BIAS IN EVALUATION

### **TOOLS FOR IMMEDIATE USE**



- Know the research
- Recognize bias & write fair review letters
- Use citation metrics with skepticism
- Consider new metrics
- Consider review committee
  dynamics

Tools

EFFECTIVE METHODS TO PROMOTE EQUITABLE FACULTY EVALUATION

- Allow sufficient time to review materials
- Use structured processes to choose & discuss each of the criteria
- Come to meetings prepared to share and discuss your evaluation of agreed upon review criteria
- Use multiple forms of evidence to support evaluation

### MULTIPLE FORMS OF EVIDENCE

Picked up by 8 news outlet(s) Blogged by 26 Tweeted by 142 On 22 Facebook page(s) Referenced in 1 Wikipedia pages Mentioned in 3 Google+ post(s) Reddited by 2 On 1 video(s)

Usage

PLOS: views PDF downloads XML downloads PMC: views PDF downloads

Citations

PubMed Central CrossRef Scopus Web of Science

273 readers on Mendeley 0 readers on Connotea 19 readers on CiteULike

Altmetrics – online presence, https://www.altmetric.com

Social CiteULike Mendeley Twitter Facebook

Mendeley Twitter Facebook

Blogs & Media Nature Blogs ScienceSeeker Research Blogging Wikipedia Trackbacks

(Fenner and Lin 2014)

Alternative: Citation Content/Concept Analysis

## THE REVIEW COMMITTEE AS A HIGH PERFORMING TEAM







"Smarter" teams have more women! More social sensitivity Inclusive behavior can overcome obstacles even online

Tools

### LEVERAGING TEAM SCIENCE TO MAKE EVALUATION REVIEWS INCLUSIVE

- INCLUSIVE PROCESSES
  - Develop and use structured criteria
  - Norm criteria
- INCLUSIVE PRACTICES
  - Social sensitivity
  - Transparency
  - Multiple forms of evidence

SUMMARY: TOOLS FOR EQUITABLE & INCLUSIVE FACULTY EVALUATION

- <u>Use effective processes & practices to reduce impact of hidden biases</u>
  - Intentionality, slow down, provide evidence
  - Use structured criteria with several forms of evidence
- Evaluate using an equitable lens
  - Multiple measures of impact and effectiveness
  - Mission related activity and impact
- <u>Review Context and Team</u>

Tools

- Leverage what we know about effective teaming trust, recognition, participation
- Disrupt potential biases ask for evidence, know the research

Thank You!

**Questions?** 

### **Beth Mitchneck**