ANNOTATED BIBLIOGRAPHY
March 19, 2016

BACKGROUND ON THE NSF ADVANCE PROGRAM

Holmes, Mary Anne. 2014. Advancing Women in Oceanography, Oceanography 27(4), 30-38.
A discussion of the NSF ADVANCE program and its efforts to improve the status of women in STEM.

MIT Reports.
These reports document diversity efforts at MIT. The 1999 Report and events that followed play an important role in the history of the NSF ADVANCE program.

DATA ON THE REPRESENTATION OF WOMEN AND FACULTY OF COLOR


Data from the National Science Foundation, National Center for Science & Engineering Statistics, Survey of Earned Doctorates, and other sources.

Depicts the gender distribution at AAU and non-AAU institutions.

Women are under-represented in leadership positions, even in fields where women tend to fare reasonably well in their representation.

This articles expands the discussion beyond the sciences and into the humanities.

An interactive site for examining the demographics of more than 400,000 professors at 1,500 colleges by rank, gender, race/ethnicity, and tenure status.
DIVERSITY IS NOT ORTHOGONAL TO EXCELLENCE

Fortune 500 companies with 3 or more women board directors outperform those with no women board directors.

Credit Suisse Research Institute. 2012. Gender Diversity in Corporate Performance, from Companies with ≥1 women on board delivered higher return on equity and better average growth

Female representation in top management leads to increase of $42 million in firm value, on average. Companies that prioritized innovation saw even greater financial gains when women part of top leadership ranks.

Study of 2.5M scientific research papers shows that papers written by diverse ethnic groups (based on last names) receive more citations and are more likely to be in lower-impact journals, after controlling for many factors.

EXPERIENCES OF WOMEN FACULTY OF COLOR

An edited collection that documents the experiences and challenges faced by women faculty of color in academia.

A review of research on faculty of color from 1998 – 2007 reveals common themes – for example, women faculty of color experience isolation and a lack of respect for their research – and recommendations for improvement.

IMPLICIT BIAS AND COGNITIVE SHORTCUTS, ORGANIZED BY SUBTOPIC
**Awards and Grants**

AWIS (Association for Women in Science) website: Awards and Recognition.

*Highlights gender differences in awards and recognition.*


*A controlled study: Race may be a factor in receipt of NIH R01 awards.*


*PDF available through UD library.*

*Gender appears to be a factor in awards and recognition in the sciences.*


*PDF available through UD library.*

*A controlled study on the evaluator ratings for Swedish Medical Research Council Post-Doc awards reveals that women had to be 2.5 times more successful than men to receive the same rating.*

**Best Practices for Search Committees**


**Blind Review**


*When the journal Behavioral Ecology changed its review process to double-blind refereeing, there was an increase in the number of female first authors.*


*The authors examine the role of blind auditions in the hiring of female musicians and find that this practice can help increase the hiring rate of women orchestral musicians.*

**Employment**


*The authors created fictitious resumes and rotate the names such that the same resume sometimes carried an African American sounding name and other times carried a white sounding name. Resumes carrying a white sounding name received more call-backs for interviews than those with an African American sounding name.*


*“In a randomized double-blind study (n = 127), science faculty from research-intensive universities rated the application materials of a student—who was randomly assigned either a male or female name—for a laboratory manager position. Faculty participants rated the male applicant as significantly more competent and hirable than the (identical) female applicant. These participants also selected a higher starting salary and offered more career mentoring to the male applicant.”*

Sheltzer, Jason M. and Joan C. Smith (2014). Elite male faculty in the life sciences employ fewer women,”
ABSTRACT.

Women make up over one-half of all doctoral recipients in biology-related fields but are vastly underrepresented at the faculty level in the life sciences. To explore the current causes of women’s underrepresentation in biology, we collected publicly accessible data from university directories and faculty websites about the composition of biology laboratories at leading academic institutions in the United States. We found that male faculty members tended to employ fewer female graduate students and postdoctoral researchers (postdocs) than female faculty members did. Furthermore, elite male faculty—those whose research was funded by the Howard Hughes Medical Institute, who had been elected to the National Academy of Sciences, or who had won a major career award—trained significantly fewer women than other male faculty members. In contrast, elite female faculty did not exhibit a gender bias in employment patterns. New assistant professors at the institutions that we surveyed were largely comprised of postdoctoral researchers from these prominent laboratories, and correspondingly, the laboratories that produced assistant professors had an overabundance of male postdocs. Thus, one cause of the leaky pipeline in biomedical research may be the exclusion of women, or their self-selected absence, from certain high-achieving laboratories.

General Audience Books on Implicit Bias and Cognitive Shortcuts


This book discusses the role of hidden biases in group-based social contexts (e.g., race, gender, etc.). These are biases of which people are unaware, but nonetheless influence how we interact with others.


This book discusses the role of cognitive shortcuts in our thinking. Cognitive shortcuts can be useful, but can also lead to unintended negative consequences.


A comprehensive review of work in psychology and the social sciences on why women are under-represented in many disciplines.

Letters of Recommendation


The authors investigate gender differences in the language used in letter of recommendations and argue that such differences can impact hiring decisions.


Analysis of over 300 letters of recommendation reveals gender differences. For example, women’s letters tend to focus more on teaching whereas men’s letters tend to focus more on their research. Women are more often referred to by their first name, whereas men are more often referred to by their title and last name, and so forth.

Personal Narrative


Barres reports on his experiences as a female scientist and as a male scientist after sex reassignment surgery.

Teaching Evaluations
MacNell, Lillian; Adam Driscoll; Andrea Hunt. 2014. What’s in a Name: Exposing Gender Bias in Student Ratings of Teaching. Innovative Higher Education. Published online: December 2014.

Instructors in an online class each operated under a male and a female identity. Students rated those who operated under a male identity higher than those operating under a female identity, regardless of the instructor's actual identity.


An analysis of student evaluations of teaching reveals gender bias, even with respect to qualities that are thought to be objective.

Small Inequalities Can Add Up Over Time to Create Large Scale Inequalities


A computer simulation that assumes a small bias in favor of men can lead to substantially different promotion rates between men and women.

MENTORING

AIM. Women of Color Allies and Partners:
http://advanceaimnetwork.org/overview-of-women-of-color-allies-and-partners-toolkit
This useful site contains resources on mentoring faculty of color.

A guide to the tenure process and best practices for achieving tenure, written for faculty of color.

Some useful suggestions for mentoring women faculty of color.

STRIDE, Giving and Getting Career Advice
http://www.advance.rackham.umich.edu/career%20advising.pdf
A useful resource on mentoring developed by the University of Michigan ADVANCE program.

STEREOTYPE THREAT

This article discusses the ways in which stereotypes can affect those being stereotyped in areas such as achievement.

Steele, Claude M. 2011. Whistling Vivaldi And Other Clues to How Stereotypes Affect Us.
A general audience book on the ways in which stereotypes influence a person's identity and individual achievement. Steele also discusses ways to mitigate against stereotype threat.

RESOURCES FROM UD-ADVANCE WEBSITE: HTTP://SITES.UDEL.EDU/ADVANCE/

UD-ADVANCE IT, Project Proposal
https://sites.udel.edu/advance/files/2013/01/Final-UD-ADVANCE-IT-proposal-1rm6oz3.pdf

UD Faculty Climate Survey, 2014, Executive Summary
UD-ADVANCE Institute, Recruitment Workshop Materials,
Follow the two links below to find links to workshop slides, handouts, a recruitment manual, and other recruitment resources.

http://sites.udel.edu/advance/resources-new/for-faculty/workshop-materials/
http://sites.udel.edu/advance/resources-new/for-faculty/

UD-ADVANCE Institute, Mentoring Materials
Follow the link below for links to various mentoring resources, such as a formal mentoring checklist and useful mentoring web sites.

http://sites.udel.edu/advance/resources-new/for-faculty/

UD-ADVANCE Institute, Mini-Grants
UD ADVANCE provides mini-grants to encourage women faculty’s career progression toward leadership (including promotion). Mini-grants may fund travel to professional workshops, leadership programs, or faculty-development programs. Mini-grants also may be given to science, technology, engineering and math (STEM)/social science departments or groups of faculty wishing to initiate innovative mentoring or networking activities for women faculty. Mini-grants support primarily women post-tenure and women faculty of color at all ranks. Click here for mini-grant solicitation.

UD-ADVANCE Institute, National Research Conference from April 29—May 1, 2016 titled, “Women of Color in the Academy: What’s Next?”
Focusing on faculty women of color, especially in STEM fields, this research conference brings together faculty, administrators, students, and industry and government representatives to discuss & learn about cutting edge research on the recruitment, retention, advancement, and leadership of faculty women of color, highlighting their lived experiences. At a documentary film, panels, roundtables, and poster presentations, participants will discuss research findings and exemplary practices designed to disrupt constraints on the recruitment and retention of women faculty of color; traditional and newer practices in mentoring; peer networks; career-life balance; strategies for survival and success in academia; and the lived experiences of women of color as students, graduate students, and faculty members. Attendees will have opportunities to identify research topics, network with each other, and establish fruitful collaborations. In follow-up materials, the UD-ADVANCE team will build on the insights and findings developed at the conference.
Follow this link for more information.
http://sites.udel.edu/advance/conference/