**OCEANS ’23 Resources**

|  |  |
| --- | --- |
| * **Challenge gender stereotypes and biases** | * **Encourage men to be allies** |
| * **Support women's career development** | * **Address pay and promotion gaps** |

**Challenge gender stereotypes and biases**

Gender stereotypes and biases can affect women's opportunities to attain positions of authority. It is important to challenge these stereotypes and biases by promoting gender-neutral language, providing unconscious bias training, and addressing microaggressions in the workplace.

Health Essentials  
<https://health.clevelandclinic.org/what-are-microaggressions-and-examples/>

Microaggressions are a big deal: How to talk them out and when to walk away

<https://www.npr.org/2020/06/08/872371063/microaggressions-are-a-big-deal-how-to-talk-them-out-and-when-to-walk-away>

Microaggressions/ Microaffirmations

<https://www.med.unc.edu/healthsciences/about-us/diversity/jeditoolkit/microaggressions-microaffirmations/>

We Need to Retire the Term “Microaggressions”

<https://hbr.org/2022/03/we-need-to-retire-the-term-microaggressions>

A Guide to Responding to Microaggressions

<https://ncwwi-dms.org/resourcemenu/resource-library/inclusivity-racial-equity/cultural-responsiveness/1532-a-guide-to-responding-to-microaggressions/file>

You’re Prettier When You Smile: Construction and Validation of a Questionnaire to Assess Microaggressions Against Women in the Workplace

<https://www.frontiersin.org/articles/10.3389/fpsyg.2022.809862/full>

**Suggestions for addressing implicit bias**

Counter-stereotypical exemplars

Contact with and reflection on members of negatively stereotyped groups who don’t fit the stereotype can be a powerful force in overcoming implicit bias.

* Look at your walls, and make sure the pictures aren’t just white men.
* Think about your conference invitations.

Anonymizing

Think about where anonymizing might be effective:

* Marking
* Reviewing CVs

But also: *consider* not anonymizing in order to practice affirmative action.

Be Aware of Biased Information

* References likely to have gendered content (men are “brilliant” and “original”, women are “friendly” and “hard-working”), also national differences (e.g. US reference inflation).
* Biases affect citation counts.
* Biases affect student evaluations of teaching.

Noticing contributions

There are many areas where contributions from negatively stereotyped group members get overlooked/underappreciated.

* References: Make sure you’re mentioning women’s outstanding work, not just friendliness. Check for other biases.
* Check your citations for women and members of underrepresented groups you should be mentioning.

Decision-making (e.g. promotion, hiring)

* Agree on criteria and their weighting in advance.
* Give equal time to discussion of each candidate for each criterion.
* Try to avoid relying on “gut feeling” and gestalt judgment.
* Don't let most powerful person speak first-- make sure all voices are heard.
* Insist on justifying decisions.
* Think about processes, and be sure you are giving appropriate weight to each element, taking into account potential for biased information.
* Also, try to be well-fed and rested, and try not to rush.

Mentoring

* Consider setting up a program by which women/members of underrepresented groups can request mentoring.

Don’t Neglect Other Factors

* Explicit bias, Harassment
* Structural barriers, e.g. invisible labor
* Precarity
* Caregiving

**Support women's career development**

Providing support and resources for women's career development can help them overcome the confidence gap and advance into positions of authority. This includes providing mentorship and sponsorship programs, offering leadership training, development opportunities, and promoting work-life balance.

State of Girls and Women in STEM report - high-level summary of key statistics and research related girls and women in STEM:   
<https://ngcproject.org/statistics>

Role Model Databases    
<https://www.fabfems.org/>     
<https://www.ifthenshecan.org/>

Brite Program   
<https://ngcproject.org/about/initiatives/brite>

The retention problem: Women are going into tech but are also being driven out  
<https://phys.org/news/2023-03-retention-problem-women-tech-driven.html>

Women in tech statistics: Hard truths of an uphill battle  
[Women in tech statistics: Hard truths of an uphill battle](https://www.youtube.com/watch?v=QGo9v4TE8eo&t=4s)

How to Combat STEM's Retention Issues for Women  
<https://www.labmanager.com/leadership-and-staffing/how-to-combat-stem-s-retention-issues-for-women-29098>

How Can We Retain Women in STEM?  
<https://womenintechftw.com/how-can-we-retain-women-in-stem/>

A study of factors affecting women’s lived experiences in STEM  
<https://www.nature.com/articles/s41599-022-01136-1>

Women in STEM: Keeping hold of your female talent  
<https://www.deltragroup.com/article/women-in-stem-keeping-hold-of-your-female-talent>

Women in Science, Technology, Engineering, and Mathematics (STEM) (Quick Take)  
<https://www.catalyst.org/research/women-in-science-technology-engineering-and-mathematics-stem>

Special Topics Annual Report: Women in STEM  
<https://www.eeoc.gov/special-topics-annual-report-women-stem>

Women in STEM (Science, Technology, Engineering, Mathematics)  
<https://guides.library.queensu.ca/womenSTEM/recruit>

Society of Women Engineers: Research retention data  
<https://swe.org/research/2022/retention/>

Society of Women Engineers: Research studies on women in the STEM workforce  
<https://swe.org/research/category/workplace/swe-research-workplace/>

**Encourage men to be allies**

Men have an important role to play in closing the authority gap by being allies to women and advocating for gender equality. This involves promoting diversity and inclusion, challenging gender stereotypes and biases, and speaking out against sexism and discrimination in the workplace.

Male Allies (<https://diversityproject.com/resource/male-allies-guide/>)

How Women Can Identify Male Allies in the Workplace (<https://hbr.org/2022/05/how-women-can-identify-male-allies-in-the-workplace>)

Nine Tips for Being a Male Ally at Work (<https://greatergood.berkeley.edu/article/item/nine_tips_for_being_a_male_ally_at_work>)

Five Simple Ways to Be a Better Male Ally (<https://www.jpmorganchase.com/news-stories/5-simple-ways-to-be-a-better-male-ally>)

Male Allies and Advocates:\* Helping Create Inclusive & Highly Productive Technology Workplaces (<https://ncwit.org/resources/male-allies-and-advocates-helping-create-inclusive-highly-productive-technology-workplaces/>)

Strategies that Male Allies Use to Advance Women in the Workplace (<https://www.usu.edu/uwlp/files/briefs/18-male-ally-strategies.pdf>)

Athena Rising: How and Why Men Should Mentor Women (<https://www.workplaceallies.com/books/athena>)

**Address pay and promotion gaps**

Pay and promotion gaps can contribute to the authority gap by limiting women's opportunities for advancement. Addressing these gaps requires regular pay equity audits, transparency around pay and promotion decisions, and policies that support equal opportunities for all employees.

DEI Maturity Index - (<https://www.cupahr.org/surveys/dei-maturity-index/>)

Women Executives in Higher Ed - (<https://www.cupahr.org/surveys/research-briefs/women-executives-in-higher-ed/>)

The Promotion of Women and People of Color in Higher Education Faculty - (<https://www.cupahr.org/surveys/research-briefs/the-promotion-of-women-and-people-of-color-in-higher-ed-faculty/>)

The Impact of COVID-19 on the Careers of Women in Academic Sciences, Engineering, and Medicine (2021) - (<https://nap.nationalacademies.org/catalog/26061/the-impact-of-covid-19-on-the-careers-of-women-in-academic-sciences-engineering-and-medicine>)

Women Can’t Win: Despite Making Educational Gains and Pursuing High-Wage Majors, Women Still Earn Less than Men - (<https://cew.georgetown.edu/cew-reports/genderwagegap/>)

Gender pay gap in U.S. held steady in 2020 - (<https://www.pewresearch.org/fact-tank/2021/05/25/gender-pay-gap-facts/>)

Young women are out-earning young men in several U.S. cities - (<https://www.pewresearch.org/fact-tank/2022/03/28/young-women-are-out-earning-young-men-in-several-u-s-cities/>)

Transparency Shrinks Gender Pay Gap (<https://www.shrm.org/resourcesandtools/hr-topics/compensation/pages/transparency-shrinks-gender-pay-gap.aspx>)