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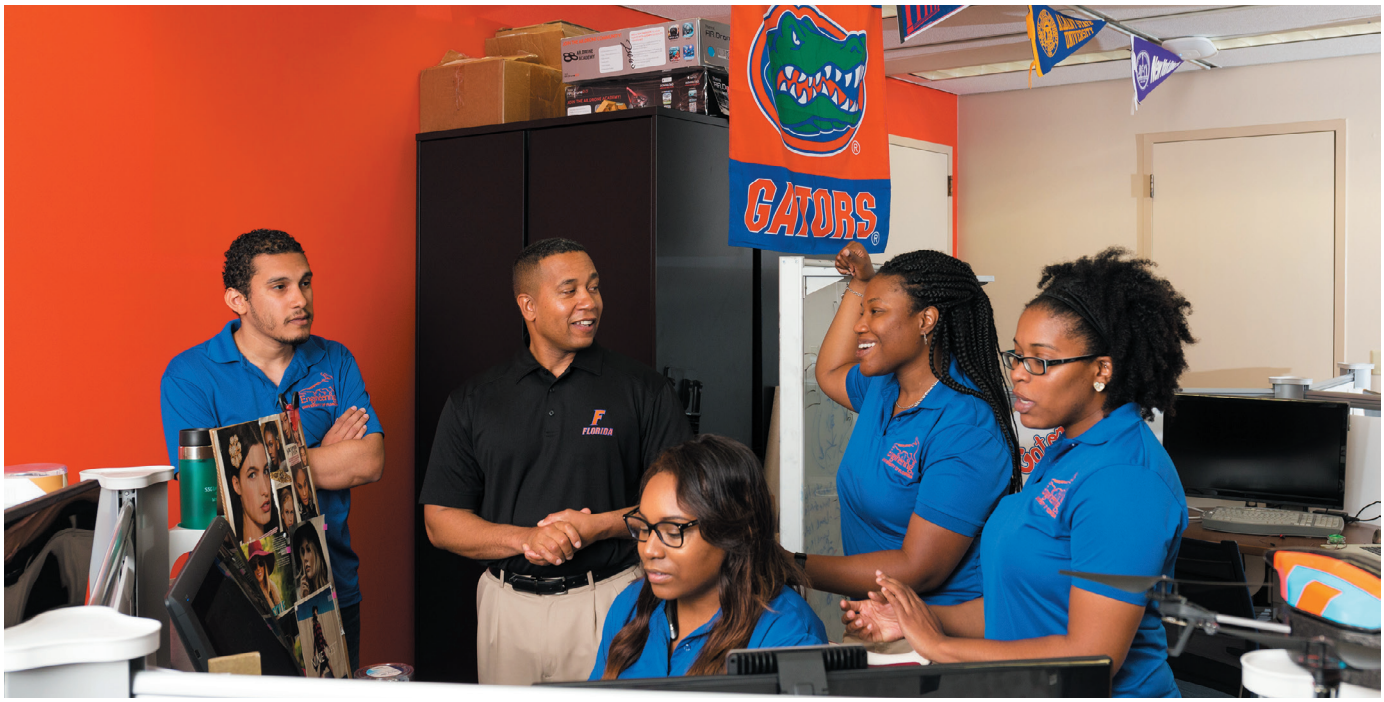


Computer scientist Juan Gilbert suggests that researchers challenge colleagues who show gender bias.

GENDER EQUITY

Ways to boot out bias

Six male researchers reveal how they are working to tackle gender inequity in the lab.

Last year, six female scientists discussed in *Nature* how they dealt with gender bias in the workplace. Several readers asked what men were doing to help. Here, six male researchers describe their efforts to support their female colleagues. Some were uncomfortable getting credit for work that they feel everyone should be doing, with one rejecting credit completely by requesting anonymity.

JUAN GILBERT
Call out the realities of bias

Computer scientist at the University of Florida in Gainesville.

At the Department of Computer and Information Science and Engineering at the University of Florida, Gainesville, we have about 20% of the African American women in the United States who are enrolled in computer science PhD programmes. We are the number one department in terms of the number of women in tenure-track faculty positions.

How do we address gender bias? From a male perspective, I think you first have to witness it. When a female colleague speaks up but then male colleagues speak over her, I politely interrupt the men and say: "Excuse me, I didn't get to hear everything she had to say." If it happens repeatedly, then you need to address it as a department. Some guys don't even realize that they are doing it. But when you call them out, it makes them reflect and say, "Uh-oh, did I just overstep?"

On search committees for academic positions in the United States, the head of a department can question why a candidate pool is all male — they might even be empowered by the dean to reject such a pool. If you don't have a good, diverse group of applicants, you can ask whether anyone knows of any female prospective candidates, and publicize the job in places that will help to attract greater diversity.

I've seen cases in which a woman is up for a permanent position and promotion but her teaching evaluations were scored lower than those of some of her male counterparts. Someone on the promotion committee might say: "Well, that means this isn't a good teaching person in the classroom." I've had to point to literature that shows that women get lower scores even when teaching the same material, and from the same textbook, as men.

Sometimes, we have to deal with gender bias at the undergraduate and graduate student levels, too. I let male students know that women are crucial to innovation and should be treated equally. Anything else is unacceptable.

I would encourage departments that are working towards gender equity to learn from our model and those of others. ▶

The US National Center for Women and Information Technology in Boulder, Colorado, has a lot of resources that are useful for helping to educate people about this issue. There is also an annual conference for female technologists, which was set up by non-profit organization AnitaB.org to commemorate US mathematician and computer programmer Grace Hopper.

SHAUN HENDY
Say no to 'manels'

Physicist at the University of Auckland, New Zealand.

In 2015, while setting up Te Pūnaha Matatini, a New Zealand Centre of Research Excellence at the University of Auckland for understanding complex data sets, we were thinking about how we could improve the centre's gender balance, as well as make sure that our workshops and conferences achieve gender parity. At the same time, I noticed that some men in the technology community were refusing to be on conference panels that comprised only men (manels) and that women were criticizing such panels online.

For the past three years, I've refused to participate on manels. When I'm invited to speak, I ask whether the conference has a code of conduct and whether there is gender balance among the invited speakers.

Early on, organizers said, "Oh wow, we hadn't thought of that — thanks for pointing it out." They now almost always come up with a way to fix any imbalance.

I have had to turn down a few things, generally because the organizers were unable to find women who could attend. I offer to help by suggesting women as potential speakers. All scientists should be doing that all the time — increasing the diversity of voices that are heard in science.

When a woman asks the first question at a seminar, the gender composition of those who ask questions subsequently will be more balanced. So when I'm leading a session, I make sure that the first question is posed by a woman.

Why don't men intervene more often when they witness discrimination or harassment? Male scientists should consider how their interventions might negatively affect the woman on the wrong side of the power dynamic. They should try to be more observant and aware. It's important to get up to speed with the literature — read the hard, scientific evidence to find out what's going on. A good place to start is Nicola Gaston's book *Why Science is Sexist* (2015).

Women are often asked to provide evidence to back up their experiences. As a man, if you make an effort to keep up with the empirical evidence on diversity and bias, then you are not burdening women with that job.

Old white guys have dominated science for a long time. It shouldn't be a monopoly.

SCOTT BAROLO
Stop replying, start listening

Developmental biologist at the University of Michigan Medical School in Ann Arbor.

There was not one incident that led me and a colleague to start the Twitter handle @9ReplyGuys, but I had noticed patterns in how men replied to tweets by female researchers on the social-media platform. In some cases, these were tweets about the women's science, but others were about their experiences with sexual harassment and misogyny. I saw the same few types of reply, over and over again. Yet I wasn't getting aggressive or dismissive replies from men when I was tweeting.

The women said: "Why do I have to have the same arguments with different random dudes, over and over again? It's exhausting. But if I don't argue with them, then I'm letting them, or others, believe they are right."

I thought it might be helpful to identify the categories of reply (go.nature.com/2dtzhwp) to provide a resource that women could link to in a Twitter conversation to call out harassment.

I ran the idea past my colleague, a female psychology professor who is based in the US Midwest and uses the anonymous Twitter handle @shrewshrew, to see whether she thought it was a good one and to ask if she wanted to draw the Twitter avatar, because she's a good artist. We collaborated on the whole thing.

How many times does a female scientist post something about her research, and then see endless advice, sometimes well meaning, pour in from all these guys? She wasn't asking for advice. It makes women feel as if they can't say anything.

The response from women on Twitter has been overwhelmingly positive. A lot of women have seen the value of labelling these common behaviours. Many responses from men have been extremely negative because they encounter @9ReplyGuys when women tag their behaviour as falling into one of the nine categories of reply. They say: "But I wasn't 'mansplaining'." Yes, you were.

Those aren't productive exchanges, but it can be productive for other men to see push-back from women.

I don't want to give men an excuse, but we've been trained and encouraged to be the loudest person in the room. In science and engineering, especially, we are expected to be problem solvers and we are hired for that kind of behaviour. What we're not trained to do is to read the room and ask, "Am I saying something that people don't know and need to know? Or am I being condescending?" It doesn't usually feel wrong until someone calls us out on it.

Another researcher who tweets for social justice, Needhi Bhalla, a cell biologist at the University of California, Santa Cruz, says that men should get more comfortable with being uncomfortable, because women and people from under-represented groups around them have to live in that world all the time.

The advice for reply guys is to stop replying and to start listening to women. To me, that's just the beginning and the end.

PAUL WALTON
Balance gender at the top

Bioinorganic chemist at the University of York, UK.

In 2007, when I was leading the Department of Chemistry at the University of York, UK, we became the first department to receive a gold award under the Athena SWAN Charter — a national scheme to recognize efforts to advance the careers of women in science and engineering in academia and research. I try to promote an approach to gender equity that is based on evidence from social-science literature.

The first message is that equity does not come at the expense of quality. The second is that gender inequality is not just a problem for women to solve — we should all be involved. And the final message is that equity can be achieved.

As a department, we've applied peer-reviewed findings about unconscious bias to day-to-day activities such as meetings, awarding promotions and short-listing candidates for open positions. At the beginning, we had a gender bias in our shortlists, so we brought in colleagues to observe the hiring process. They would watch their peers, not the candidates, and then describe the ways in which the selection committee were showing unconscious bias. For example, an observer might record that one faculty member made, on average, ten positive comments for each male candidate, but only five for female candidates.

This was extraordinarily powerful in helping us to change how we behaved. The department also realized that there was a big gap between what men and women knew about the requirements for promotion. To help to fill that gap, we publish depersonalized information internally about what each person has achieved by the time they are promoted.

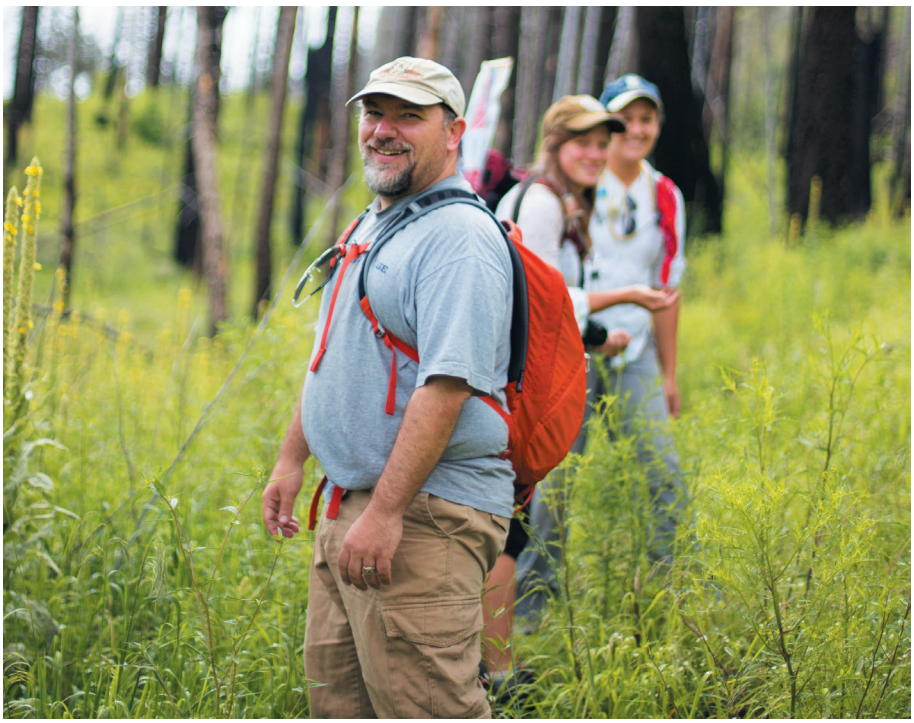
We have also become more transparent about pay by annually publishing the differences in median pay for men and women in various roles, including professors and technicians, and then showing how any gaps are varying with

time. That was successful because we pushed to get the data and publish them.

My motivation is fairness. Women in senior roles often explain that they don't want to be promoted on the back of gender equity efforts, because it devalues their achievements. But research has shown that for a woman to receive the same rewards as a man, she has to put in more work. Across many types of organization, I estimate that women have to put in 20–40% more effort. This means that men achieve amid a sea of disadvantage against women.

As a man, I don't want to achieve against a background of unfairness. I want to achieve on a level playing field — so I feel that what I've earned is fair, too.

These problems exist for women everywhere. It doesn't matter which country, university, discipline or culture, or what time it is.



MICHELE LANAN

Entomologist Terry McGlynn says that small shifts in men's behaviour can help to trigger culture change.

TERRY MCGLYNN

Ally is a verb that requires action

Entomologist at California State University, Dominguez Hills, in Carson.

Telling women how to navigate a world in which men make obstacles for them is a problem. Instead, men should be educating other men on how to remove those obstacles.

You can't talk about gender equity unless you also deal with intersectional equity — for transgender women, Latinas, women from Indigenous communities, women who are the first in their families to reach university, and so on. Men should take more responsibility for catalysing the culture change because men are, principally, the problem.

There are several ways in which men can take action. Educate yourself so that you can make small changes on a daily basis in your interactions. Microaggressions towards women include talking over them in meetings, stealing credit for their ideas and calling them 'Ms' instead of 'Dr'. If you are aware of all the ways in which gender harassment manifests, then you can intercede in the moment.

Bystander-intervention training demonstrates how to go about this without being a scold. Responses can range from, "That was a completely inappropriate comment," to "Here's another way of saying that."

As a teacher, dean, professor, postdoctoral researcher, student or technician, what interventions could you make that are more substantial? Because women have more to lose if they speak out, could you send an e-mail or make a phone call to advocate for policy change? As a graduate student, could you suggest more representative speakers for your department's seminar series?

Every man in each kind of position can do something to fix a cultural problem in his setting. Ally is a verb — which requires action to be taken — not a noun.

Probably the most important thing that men can do, including myself, is to shut up and cede the stage.

ANONYMOUS

Step back and make space

Computer scientist at a university in India.

Early in my career, I was a thesis adviser to a married PhD student who had become pregnant. She was experiencing problems with her in-laws and had to leave the programme for a while. I saw her struggles at first hand.

A female colleague at my present university was whistled at by her male students. When she complained, she was criticized for how she dressed. Nothing came of the inquiry into that incident. These things left a bad taste in my mouth.

About three years ago, I came across two female science journalists and their blog, *The Life of Science*, on which they publish profiles of Indian women in science. I thought that our campus would benefit from getting these journalists to come and talk about their project.

The number of faculty members who attended their talk was pathetically low — perhaps 5 or 6 people from a faculty of 400. This is indicative of how gender equity is viewed here: people just don't want to deal with the issue.

However, the panel discussion that followed got some good traction with the mostly student audience. We had reached the edge of something that people did want to talk about, but they were still reluctant to do so.

Last year, I joined a group of professors who were setting up an office for gender equity on campus. This office would promote the integration of gender equity into the day-to-day life of students, and also look at ways to increase the numbers of women entering science and engineering in India.

We secured a physical space and hired two programme officers. But, at the end of 2018, I deliberately took a step back from the project to make space for more women to join our committee.

More than one-third of our faculty members have joined the university in the past 10 years, many are below the age of 45 and many are dynamic women who have the self-confidence and swagger of their male colleagues. That's a great thing.

I'm not looking for honour or glory. I wanted to do the project because I love my institution. I want it to be a place that I can be proud of.

Many years ago, I heard the US author and activist bell hooks speak, and she said: "Feminism is the struggle to end sexist oppression." I felt included in that statement. When you see such oppression, you have to oppose it, whether you are a man or a woman.

At the end of the day, let me be clear: I'll never understand fully what a woman goes through. If something needs to be done, do it quietly and let women lead the effort. ■

INTERVIEWS BY KENDALL POWELL

These interviews have been edited for clarity and length.