

## Women Are Invited to Give Fewer Talks Than Men at Top U.S. Universities

It's not because they turn down talks more often, or because there aren't enough women to invite.



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*Updated on December 18 at 3:51 p.m. ET*

A few years ago, Michelle Hebl attended the latest in a series of talks hosted by her department at Rice University. The speaker was a man, and Hebl realized that she hadn't heard any female speakers in that series for a while. "Maybe I'm just not thinking about them," she thought. "Or maybe it's something we should look at."\*

Colloquium talks, where academics are invited to discuss their research, give speakers a chance to publicize their work, build collaborations with new colleagues, and boost their reputations. The talks can lead to promotions or job offers. They are big opportunities. But as Hebl's student [Christine Nittrouer eventually found](#), they are opportunities that are predominantly extended to men.

Nittrouer and her team scanned the websites of the top 50 U.S. universities, as ranked by *U.S. News*, to build a database of every colloquium speaker from six departments: biology, bioengineering, political science, history, psychology, and sociology. They chose those six to represent a breadth of disciplines, and to exclude departments with either a very low or very high proportion of women. And they found that men gave more than twice as many talks as women: 69 percent versus 31 percent.

That result should not be too surprising. [Several studies](#) [have](#) shown [that men](#) outnumber women among the speakers of [several scientific conferences](#). There's even a site that collates examples of [all-male panels](#).

Why does this happen? Hebl accounted for several of what she calls "yeah-but explanations," which underplay these figures as the result of anything other than discriminatory biases. For example, some might argue that men outnumber women in many fields, and so any equitable selection process would naturally lead to more male speakers. But the team estimated the full pool of available speakers by counting every professor in their six chosen fields at each of the top 100 U.S. universities. And even after adjusting for the relative numbers of men and women in the various fields or ranks, they found that men are *still* 20 percent more likely to be invited to give colloquium talks than women.

Skeptics might also argue that the problem is a generational one: Science, for instance, has historically been skewed toward men, and when colloquia committees decide whom to invite, they're prisoners of that history. But if that were true, and the arc of academia was slowly bending toward equality, then when assistant and associate professors—who are younger and more junior than full professors—are selected to give talks, the gender difference should be narrower. Hebl's team found no such trend. "The people in whom we should see more parity aren't showing us more parity," she says.

"People sometime say: You know what? Maybe it's the women," says Hebl. "Maybe they don't *want* to give talks, or they're declining because they're staying home with their kids." That's not what she found when she surveyed 186 professors who didn't give colloquium talk at prestigious universities, but were in the same departments as those who did. Their answers clearly showed that women don't decline colloquium invitations more than men, that they feel just as strongly that these talks are important for their careers, and that they're no more likely to decline such talks because of family obligations.

"This dispels the widely held myth that women are less frequent speakers because they travel less," says [Jo Handelsman](#), from the University of Wisconsin at Madison. "Clearly, we need to test such assumptions before we absolve ourselves of culpability in creating biased slates."

"Despite their presence in departments, women are not being asked to contribute to the intellectual development of their fields in the most coveted ways," says [Robin Nelson](#), from Santa Clara University, who has studied the prevalence of harassment in science. "This gendered discrimination minimizes women's visible contributions to their fields, validating the idea that the greatest intellectual contributions are made by a few brilliant men."

"We can account for all the yeah-buts," Hebl says, "but we still have this bias, and we need to do something about it."

One solution is to give women more power over inviting colloquium speakers. The team found that when those committees are chaired by women, half of the invited speakers are women; that's compared to just 30 percent when the committees are chaired by men. "I'm not sure if these are explicit bias, where male chairs are saying we don't want women," Hebl says. "It's more about the people who they think about, who are in their networks. And maybe women just know other women in the field."

But in male-dominated fields, “if we take the few women we have and we put them on all the committees, we’re overwhelming them with experiences that aren’t necessarily helpful to their *own* progress,” Hebl says. Ultimately, “the burden falls on male allies. We need to train men to be aware of these biases. And we should put women on the *important* committees—the ones that decides who’s going to be our new board member, not the one that decides where we have our holiday party.”

Yael Niv, from Princeton, who created a site to monitor [gender biases at neuroscience conferences](#), says that her department solved the problem of all-male colloquia by requiring faculty to nominate a certain base rate of women as possible speakers. “In this way, we encourage everyone to think a bit deeper about their nominations, and cast a slightly wider net,” she says. “The results have been colloquia with equal numbers of men and women in recent years, and a wider, more interesting array of scientific ideas that we’re exposed to.” And even if committee members struggle to think of female speakers, several scientists have now compiled lists of possible names in [microbiology](#), [astronomy](#), [physics](#), [evolution](#), [political science](#), [neuroscience](#), and more.

“While finding more women gatekeepers may help get more women colloquium speakers, will it actually solve the whole problem?” asks [Kelly Ramirez](#) from Colorado State University, cofounder of [500 Women Scientists](#). “Probably not. There are so many things that can make science a toxic or difficult environment for women.” [When seeking jobs](#), women are viewed as being less competent than identical male applicants. They’re offered lower salaries and fewer opportunities for mentorship, and they’re given shorter [letters of recommendation](#) with more hedging words. [When teaching](#), they’re rated more negatively. When simply trying to work, they face high levels of [sexual harassment and assault](#).

The solution, Ramirez says, is to “build a strong and large network so whatever the challenge, women scientists will have a network to turn to. And we need to speak up, set examples, and hold people and institutions accountable.”

All of these barriers are particularly profound [for women of color](#), who [face a double whammy of discrimination](#) because of both their race and gender. It’s telling that Hebl’s team wanted to look at whether ethnicity deepens the gender disparity among colloquium speakers, but with the universities they looked at, they couldn’t find enough professors of color to get a statistically strong sample.