Though they may lack the overt frattiness of certain tech gatherings, academic conferences in the sciences are often similarly prone to a quieter kind of sexism: the all-male panel.

Women are still underrepresented as speakers at scientific conferences, something that hurts their career prospects in competitive academic fields where networking and showing off one’s findings are crucial. And fewer women climbing to the top of their scientific disciplines also means fewer role models for younger women and girls as they choose careers.

Several solutions have been proposed: My colleague Becca Rosen, for example, suggested that men simply refuse to speak on all-male panels. But now it appears as though there’s an even simpler way to try to stop a gender imbalance before the conference planning ever starts.

A new study in the journal mbio led by researchers at Yale University and the Albert Einstein College of Medicine of Yeshiva University says that to make scientific meetings less testosteroney, just make sure at least one woman is in charge of organizing it.

“Put at least one woman on the team that organizes a scientific symposium, and that team will be much more likely to invite female speakers,” said study co-author Arturo Casadevall, chair of microbiology and immunology at Yeshiva University, in a statement. The authors analyzed 460 symposia involving 1,845 speakers in two large meetings sponsored by the American Society for Microbiology, the General Meeting and the Interscience Conference on Antimicrobial Agents and Chemotherapy.

Here’s how big a difference a single woman makes:
The symposia convened by all-male teams contained 25 percent female speakers on average. For the symposia in which the convener teams included at least one woman, women comprised an average of 43 percent of speakers—which meant that including at least one woman among the conveners increased the proportion of female speakers by 72 percent compared with symposia convened by men alone.

Meanwhile, the researchers found that on average, 30 percent of meetings organized by a group of all men had sessions with all-male speakers. Of course, sending out the right mix of invitations is only half the battle when it comes to correcting the gender imbalance at conferences.

Earlier this year, researchers at the University of Sheffield in the UK found that female biologists were underrepresented at a major conference in Europe, even when taking into account their comparatively smaller numbers. But the reason for the skewed demographics wasn't entirely the organizers' fault. Men, it seems, accepted the invitations more often than women did.

"The most demanding phase of a career in biology, when it is important to communicate one's findings, and to build networks with other scientists, coincides with the age at which women's fertility starts to decline, meaning it is their last chance to have a family," said Julia Schroeder, a scientist at the Max Planck Institute for Ornithology in Germany, in a statement. "Stay-at-home-dads are rare, therefore, these women are less flexible about traveling for work, and may be more likely to decline invitations to speak."

Women in science could clearly benefit from friendlier regulations on childcare and work-life balance. But another reason for the high invitation-acceptance rate could be that, because there are fewer female scientists, and conference organizers seek them out for diversity purposes, female scientists in some niche fields might find that they can't accept all of them, particularly if doing so means traveling and they are the primary parent. (Alice Coe described the same phenomenon happening with service requests for female academics: The more requests to sit on university committees or provide special tutoring sessions female academics accept, the less time they have for publishing.)

These are complicated policy issues, but we should still err on the side of inviting women, and leaving the decision to accept up to them.