

The Male Box: Male Researchers Respond

In doing research for the accompanying story on whether there is a "female style" of doing science, *Science* interviewed mainly women—largely because women seem to have considered this issue far longer and more carefully than men have. Nonetheless, it seemed imperative to get the reactions of male scientists to the idea as well. What follows is a sampling. We would be delighted to have your reaction to the question of whether there is a "female style" in science—and to this year's "Women in Science" section generally. Please turn to the Reader Response Form on page 432.

"If you are looking for a nearly pure model of an applied science constructed entirely by women, [take a] look at nursing science....The nursing faculty I work with are better scientists than most male engineers or physicists of my acquaintance. They exhibit less interdisciplinary bias, are less competitive, more collaborative, less motivated by careersmanship, and more driven by genuine interest in scientific discovery and concern about the value of their work for society. They are fastidiously ethical and would rather write a few good papers than a lot of short vita-stretching piffle. They are more likely to pursue big grants with a large interdisciplinary grant team, addressing complex real problems, rather than trivial, isolated, incremental science. I have found them scrupulously fair in allocating credit for collaborative work....When their vitas are evaluated head-to-head with other academics—say at the university provost level—the different modes of scholarship may make comparison difficult. The provost may not have ever experienced selflessness in an academic scientist before."

—Robert Burr, *Bioengineer, University of Washington*

"I haven't seen any particularly 'womanly' style of astronomy. There is, of course, a great deal of variability among astronomers. You can find women around here with the most extreme 'type A' personalities, as well as women who are very laid back and easy going; the same can be said for men....I think that there is more variability among astronomers in general than between female astronomers and male astronomers."

—Bill Gawne, *Space Telescope Science Institute*

"As different styles can contribute to science in different ways...then it would be better if the culture of science changed to accommodate those more fully, regardless of whether we are talking about possible gender differences or not....The bottom line for me is creating an atmosphere based on mutual respect, in which everyone can contribute to his or her best advantage."

—Peter Raven, *Director, Missouri Botanical Garden*

"My impression from my own experience is that if you make a spectrum of behaviors dealing with things like amount of competitiveness or amount of cooperativeness or whatever, that male and female curves may be shifted, but they would certainly

overlap. I think [the difference between men and women] may be a real phenomenon, but it is not a major phenomenon."

—Gerald Rubin, *Geneticist, University of California, Berkeley*

"The women I know think and approach problems in the same way as men....There is, however, a difference in the behavior of men and women....I have often seen a man argue down a weaker "opponent" (male or female) even though he is wrong. If you are aggressive and loud, that is often mistaken for being correct! This is certainly not uncommon in other spheres of life either. But I think if you ask female scientists, you will find that in order to make it in their field, they had to develop a tougher exterior. In my experiences, I have never met a woman who was belligerent, unless provoked by her male colleague. In that respect I think women could bring a more "rational" discourse to science if they became a significant percentage of the scientific community."

—James D. Garnett, *Infrared Astronomy Group, University of Rochester*

"If a man is difficult, he is viewed as a tough guy. He can still garner respect. A woman with those characteristics loses respect, in the eyes of many men. It is a Catch-22. If a woman is feminine, she is not viewed as serious, if she adopts more male-like behaviors, such as aggression, then she is viewed as not having the competence to be a complete scientist and person at the same time."

—James Mullins, *AIDS Researcher, Stanford School of Medicine*

"Women may think they are different, but they are probably not. Greater differences in styles of research exist between different fields of science, within sub-areas of one field, and even between research groups in a single subdiscipline."

—James Collman, *Chemist, Stanford University*

"Women are a small minority in technical fields and share the problems of minorities. They stand out in class because they are different, which means their questions or comments are more likely to be remembered, especially if they are particularly bright or not so bright. This exposure can cause shyness and unwillingness to participate in class, which feeds one of the stereotypes. After college they will stand out like sore thumbs at conferences and the work place, and men will remember their talks (good or bad) simply because they were given by women."

"Some of my women students feel that women lack self-confidence in comparison to men and that they require more positive reinforcement than men....My experience is that many men have similar problems—but may be better at bottling them up in public to meet the male stereotypes."

—Robert M. Gray, *Electrical Engineer, Stanford*