Unresolved gender wars in the science lab

Gender bias is the usual explanation for why few women reach the top levels of academic science. But what if the explanation is more complex than that? "The Science on Women and Science," a collection of articles published by the AEI Press and edited by Christina Hoff Sommers, a resident scholar at the American Enterprise Institute, tackles the question from a variety of angles. The answer is not as simple as long believed. The book shows that research on gender and vocation is complicated, contradictory and far from resolved.

Christina Hoff Sommers

A reporter from Nature recently asked Mary Hall Reno, outgoing chair of the Committee on the Status of Women in Physics, about the state of the debate on why there are so few women in fields like engineering and physics. Dr. Reno was taken aback that anyone could possibly think there was anything to debate. Institutional bias, she replied, had been shown to be the primary obstacle to women's ascension in academic science and engineering. "I thought we were past this," she said. "We don't need more debate."

The White House agrees. At a roundtable last summer, presidential advisor Valerie Jarrett and Secretary of Education Arne Duncan, joined leaders from several women's groups to discuss plans to use the Title IX equity law to secure gender justice for women in math and science. "Title IX is about so much more than athletics," said Secretary Duncan. The unquestioned premise of the discussion was that women are victims of pervasive discrimination in the laboratory. "We are hardly going to rest on our laurels until there is absolute equality," Ms. Jarrett promised the participants.

Officials at the National Science Foundation are fully on board and are ready for action. They have developed dozens of innovative anti-bias programs through a 130-million dollar initiative. Any physics, engineering, or math program that hopes to avoid a Title IX investigation can now demonstrate its commitment to equity by taking part in the NSF programs. They could attend a workshop that encourages participants to question the hyper-competitive, work-obsessed ethos that prevails
in American science and to consider moving toward a more female-friendly, balanced-life model.

Alternatively, they might bring in a theater group that performs awareness-raising skits where, for example, overbearing male physicists ride roughshod over hapless but obviously intellectually superior female colleagues. There is also Gender Bias Bingo developed by activist scholars at the University of California Hastings College of the Law with the help of a $300,000 NSF grant.

Here is the problem. Serious scholars have been producing study after study suggesting that simple bias is not what is holding women back. A recent example is the book "The Mathematics of Sex: How Biology and Society Conspire to Limit Talented Women and Girls," by Cornell University psychologists Stephen Ceci and Wendy Williams. They review the current research on why women are underrepresented in fields like engineering and physics, and over-represented in disciplines like psychology and veterinary medicine. They show that institutional bias is a weak and implausible explanation. (On the other hand, readers looking for "proof" that women are less math-capable will not find it here.)

In one stunning critique after another, Ceci and Williams demonstrate that the research at the heart of the gender bias movement is riddled with fallacies and inconsistencies. Classics of the genre, such as a 1997 Swedish study of alleged sexism in peer review and the 2007 National Academy of Sciences' "Beyond Bias and Barriers," fall apart under the authors' analysis. Ceci and Williams also note, with dismay, the hostile environment faced by scholars who dissent from the assumptions of the gender-bias crusade.

"The Mathematics of Sex" is getting praise from both sides of the debate. Raegen Miller, a researcher at the liberal-leaning Center for American Progress, calls it a "lifeline" for restoring reason and balance to a discussion now poisoned by "victim narratives" and "paternalistic responses." Frank Farley, former president of the American Psychological Association, says, "All further considerations of this important issue in scholarly debates ... must now start with this book."

Looked at from the cool and analytical perspective of Ceci and Williams, the crisis mode at the White House roundtable, plans to "Title-IX" engineering and physics programs, and the fanciful NSF initiatives seem ridiculous. The authors warn that women are not well-served by shoddy, one-sided research -- however well-
intentioned: "Advocacy in the guise of science is a short-sighted strategy." But for the time being, advocacy in the guise of science is in the driver’s seat in Washington.

Scientific preeminence is one of America's greatest national resources. President Obama and NSF officials should be doing all they can to preserve it. That means finding creative and effective ways to encourage gifted students of both sexes to pursue careers in science and technology. But it also entails reigning in a small but highly influential lobby that aims to make academic science a new playing field for gender politics.