

# Stereotyping prime obstacle to women in commercial science

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Female professors are almost 50 percent less likely than their male counterparts to be invited to join corporate scientific advisory boards (SABs) and start new companies mainly because of gender stereotyping, says University of Maryland researcher Waverly Ding, an assistant professor of management at the Robert H. Smith School of Business.

Beliefs that women lack leadership and business savvy, and are not capable of helping new ventures attract investment, block their advancement in these areas, she says.

Ding, with co-authors Fiona Murray of MIT and Toby E. Stuart of University of California Berkley, draw this conclusion from survey data and related statistics from the [biotech industry](#) and 6,000 U.S. scientists whose careers span 30-plus years. The study, "From Bench to Board: [Gender Differences](#) in University Scientists' Participation in Corporate Scientific Advisory Boards," appears in a recent issue of [Academy of Management Journal](#).

The study controlled for the scientists' professional accomplishments, social networks, employer characteristics and proxies for subject interest in commercial science.

"Women are available," says UMD's Ding. "The numbers are there. They just are not being selected." In the data sample's final year (2002), women comprised about 30 percent of about 6,000 PhDs from U.S. universities or [research institutions](#), but just 7 percent (49 of 720) of

those scientists served on SABs of 511 U.S. [biotech firms](#). She says this percentage never exceeded 10.2 during the study's 1972-2002 window.

Though her data appears to be the latest available that's specific to the SAB [gender](#) breakdown in the biotech industry, Ding says she suspects the percentage of female SAB members serving biotech firms falls below the overall, 12.6-percentage of women on U.S. corporate boards in 2012 (according to an independent study: <http://info.gmiratings.com/gmi-ratings-2012-women-on-boards-survey/>).

But, she says, academia can effectively counteract the inequity.

"University scientists have helped create at least half of the publicly traded biotech firms operating today, and our data shows a female professor is most likely to draw a science advisory board invitation by tapping into her school's technology transfer office," says Ding.

"Biotechnology founders strongly gauge an SAB candidate's reputation and quality of his or her network in determining that individual's business savvy."

But not all institutions formally support such offices – even though they "provide an ideal means for academic administrators to raise the profile of their high-performing female scientists," she says. "Networking by way of technology-transfer offices can be useful in promoting the research of women faculty and brokering connections between them and influential members of the entrepreneurship and investment communities."

She concludes the influence factor is a major issue, since gender bias appears most active in high-profile companies backed by high-status venture capitalists. "When female scientists do receive invitations to join boards, they generally come from small start-ups with limited financial backing."

Further measuring the effects of specific areas of research interest and individual career aspiration on the SAB gender gap can deepen the understanding this issue and help erode gender [inequity](#) more broadly at the corporate leadership level, says Ding. "Our nation's continued preeminence in science and technology will depend on engaging the best and the brightest, regardless of gender."

Provided by University of Maryland

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