



SCIENCE

## Gender bias typical, study of science faculty finds

By **Kenneth Chang**  
New York Times

Science professors at U.S. universities widely regard female undergraduates as less competent than male students with the same accomplishments and skills, Yale researchers concluded in a new study.

As a result, the report found, the professors were less likely to offer the women mentoring or a job, and if they were willing to offer a job, the salary was lower.

The bias was pervasive, the scientists said, and probably reflected subconscious cultural influences rather than overt or deliberate discrimination.

Female professors were just as biased against female students as their male colleagues, and biology professors just as biased as physics professors — even though more than half of biology majors are women, whereas men far outnumber women in physics.

"I think we were all just a little bit surprised at how powerful the results were — that not only do the faculty in biology, chemistry and physics express these biases quite clearly, but the significance and strength of the results was really quite striking," said Jo Handelsman, a professor of molecular, cellular and developmental biology at Yale.

Handelsman was the senior author of an article reporting the findings, published online Monday by Proceedings of the National Academy of Sciences.

Discussions of gender bias in science and mathematics have been complicated by a host of factors — including whether women receive preferential treatment through affirmative action or whether innate differences indeed exist between men and women.

To avoid such complications, the Yale researchers sought to design the simplest study possible. They contacted professors in the biology, chemistry and physics departments at six unnamed major research universities and asked them to evaluate, as part of a study, an application from a recent graduate seeking a position as a laboratory manager.

All of the professors received the same one-page summary, which portrayed the applicant as promising but not stellar. But in half of the descriptions, the mythical applicant was named John, and in half the applicant was named Jennifer. (They were asked not to discuss the study with colleagues, limiting the chance that they would compare notes and realize its purpose.)

On a scale of 1 to 7, with 7 being highest, professors gave John an average score of 4 for competence and Jennifer 3.3. John was also seen more favorably as someone they might hire for their laboratories or would be willing to mentor.

The average starting salary offered to Jennifer was \$26,508. To John it was \$30,328.

The bias had no relation to the professors' age, sex, teaching field or tenure status.