

# SCIENCE

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# LETTERS

## Elimination of Scholarships

Jay Hegde (Letters, 29 Oct., p. 637) asserts that science students “enter graduate school for the wrong reasons” when they seek “wholesale tuition waivers and stipends.” The implication is that students, with their sights set only on the big bucks they’ll rake in as graduate students, disregard that they may be unemployed after receiving their doctorate because of the lack of professional-level positions. Anyone who has gone through graduate school on a tuition waiver and stipend knows that big bucks it ain’t, so that is unlikely to be the major reason someone chooses to continue his or her education.

There are a number of reasons why elimination of scholarships is not in the best interest of scientists and the future of science. For one, eliminating scholarships would eliminate students who come from low-income families. Second, scholarships provide an incentive for all undergraduate students to compete and do their best. In addition to financial return, scholarships bring prestige and afford students the opportunity to focus on academic endeavors either unencumbered or in conjunction with research-related jobs. Finally, departments that offer attractive scholarships are able to woo outstanding students who have varied talents and interests. A published, summa cum laude biology student who also has a flair for chemistry may get an offer from the chemistry department that would be hard to pass up.

Regardless of the number of students who could not or chose not to pursue science due to the elimination of scholarships, if the aim of science education is to secure the best interest of future scientists and the future of science, then the goal should be to gain the broadest spectrum of talented science students. This is because, of course, a broad base of input tends to stimulate innovation. Scholarships are certainly one means to that end.

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The reduction or elimination of stipends and tuition waivers would have two immediate and counterproductive effects: it would greatly bias the applicant pool toward those from wealthy families, just at a time when recruitment efforts need to be broadened. It would also necessitate even larger undergraduate laboratory sections (absent sufficient teaching assistants), also just when the

quality of science education is being challenged by classes that are too large.

I know of no evidence that the paltry subsidies our graduate students receive are an incentive sufficient to encourage entering graduate schools “for the wrong reason.” Doctors and lawyers, unlike most scientists, can usually manage to pay off loans accumulated during their studies. I doubt a zoology graduate student would even find a bank foolhardy enough to make a tuition loan.

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## Women in Biomedicine

With regard to the Random Samples item “Women in biomedicine: Still slugging it out” (29 Oct., p. 650), we are pleased to see the issue of women in science being directly addressed, both by the Howard Hughes Medical Institute and in *Science*. However, we would like to mention several additional points that we addressed in our discussion and place some of the quotes into context.

As women at various stages of our scientific careers, we think it is useful to talk about the problems that women often face, the factors in our own lives that have helped us overcome some of them, and potential solutions to those that we are still struggling with. We believe both positive and negative experiences should be included if such a dialogue is to be of any value. Because the positive aspects of our discussion were not reported in the Random Samples piece, our comments appeared to have a negative tone that did not accurately reflect our feelings.

We are particularly concerned about how our comments about having children were conveyed. Many women either drop out of or do not pursue academic positions because of the difficulty in combining such a demanding profession with the responsibilities of caring for young children. This conflict is not a problem unique to science or to women. Our purpose was to discuss ways to ameliorate the problem, not to suggest that women in science would “be well advised to forget about babies.” We suggested (as have many others) that the scientific establishment should recognize and respect the fact that people who have committed themselves to caring for a dependent family member