

graceless and unfounded. They are also inappropriate and irresponsible. But, most important, they are wrong.

It is often said science works only because of the trust and collegiality among scientists. This is true. So I don't understand why *Science* decided to violate this principle with its own peers.

Michael Heylin

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Response: It is understandable that Heylin, as Jacobs's colleague, would wish to defend her. And journalists and *C&E News* readers alike will be delighted if Jacobs enhances both the vigor and authority of that publication's news coverage. But Heylin's argument goes too far and may mislead.

Hardly a day goes by when a columnist isn't analyzing the odds of success of prominent figures undertaking new responsibilities. Some sports writers predicted from day one that the sensational basketball player Michael Jordan would not make a very good baseball player. Likewise, most scientists would comment if a prominent laboratory plucked from the ranks of its marketing team the next head of basic research. Edi-

torial writers tip us off with prescience; those who are wrong soon find themselves ignored. Jacobs has sought, and is taking on, high responsibility. Like all occupants of powerful positions, she will be scrutinized from the outset. Science journalists, in conducting this scrutiny, should hold themselves to the same standards of journalism that their mainstream colleagues do.

Ellis Rubinstein

Rubinstein's editorial is a brave piece. He is absolutely right to draw attention to a sudden lurch in the direction of lightly qualified scientific editors. All kinds of dangers can result from the appointment of inexperienced and youthful editors. He will probably get some brickbats, but I was pleased to see him take a stand.

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Science and Political Reality

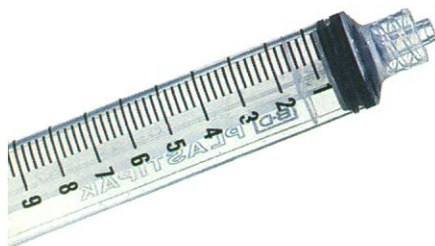
Richard S. Nicholson (Editorial, 2 June, p. 1259) expresses a variety of concerns that I

would like to address. At times he appears to misunderstand what the new Congress is trying to accomplish, and at other times he does not acknowledge the restraints placed on a responsible government. On the basic issue, however, both of us agree—funding for academic research is a vital investment in our nation's future.

Unfortunately, the political reality of today means that continuing to fund research and development (R&D) alone is not enough to ensure a bright future. We have a huge budget deficit, an inefficient bureaucracy, and government interference in areas best left to private industry. In order to fix these problems, while keeping the strong basic science infrastructure of which Nicholson writes, government needs to establish a coherent philosophy of the role of federally-funded science. As Chairman of the Science Committee, I have been attempting to articulate such a philosophy.

First, we should return the focus of government-sponsored research to the area of basic science where it belongs. Every year the United States pumps billions of dollars into corporate welfare, shelling out money to the R&D departments of huge corporations while accomplishing little. For every hundred dollars spent by government on

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these programs, the return to the American taxpayer is about 20 cents. Corporate welfare is certainly not the best way to spend research dollars.

As an alternative, I intend to focus government research on basic science. This means, contrary to Nicholson's statements, that I have no intention of discontinuing the basic research conducted at our universities and colleges. I was a teacher myself and know the importance of training a new generation of scientific leaders to keep America the frontrunner of an increasingly technological world. The committee's current budget protects basic research, ensuring that federal commitment to this area remains strong.

Additionally, by prioritizing basic science, government can leave technological development to industry. Private corporations are much more efficient than government at applying scientific discoveries, and, as our experiences with corporate welfare have shown, work best with minimal federal interference.

Finally, the federal science bureaucracy has become bloated and unmanageable. It does not allocate funds efficiently and forces researchers to spend too much time competing for funds and not enough researching. This type of waste can be reduced without hurting science. Former

Chairman of Motorola Inc. Robert Galvin has just completed a study of the government's biggest labs, and he has concluded that reforms could cut the lab budgets in half without affecting the scientific research done there at all. Clearly, there is room to improve the way that government approaches science.

We must realize that today we live in a time when there are great restraints on government. Even with budgets being cut across the board, I am committed to keeping basic academic research strong and healthy. With an end to corporate welfare and a trimming of bureaucracy we can invest in our children's future through science without a large budget deficit mortgaging this future at the same time.

Robert S. Walker

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China's "Missing" Girls

The report "High sex ratios in China's future" by Shripad Tuljapurkar *et al.* (10 Feb., p. 874) is provocative. Although it was not stated in the report, the implication of a

high ratio of male to female babies born in recent years in China was that female fetuses were aborted or female infants were killed. However, there are several alternative answers to the question of the "missing girls" in China.

According to Nicholas Kristof (1), two Swedish experts working in conjunction with a Chinese demographer concluded, on the basis of an extensive survey, that up to half of the 500,000 infant girls who appear to be missing each year are adopted informally. A second possible explanation proposed by Kristof is that parents, unwilling to pay fines for their second child if she is a girl, send the infants to be raised by relatives in other areas. A third possibility, according to Kristof, is that, in areas where family planning is lax, parents simply raise their daughters at home without registering them.

The strongest evidence that some of the "missing" girls are indeed hidden is evident from China's 1990 census. While the sex ratio for newborn infants was a highly abnormal 111.3 to 100, it dropped to about 108 for toddlers and declined further to 107 for elementary school-age children. If all the girls were killed at birth, how could they be resurrected later? It seems likely that, at a young age, the

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