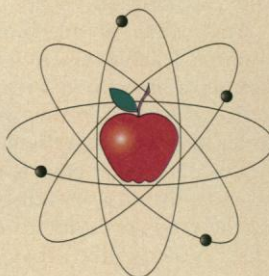


# LETTERS

## Fruits of learning

Two ways for the National Science Foundation to encourage teaching are proposed. How to "direct scientific and technological enterprises for the benefit of mankind" is discussed. Recent work on immunological tolerance is said to be useful, particularly to "vaccination programs in areas of the world where infectious diseases are a leading cause of perinatal mortality." And genetic analysis might help reveal how the Americas were first populated, as well as suggest how "preventive measures for the deleterious effects of xenobiotics" might be developed.



## Promoting Teaching

The News and Comment article by Jeffrey Mervis about the National Science Foundation (NSF) awards for "Research-Learning Links" (28 June, p. 1868) implies that \$5 million was being spent to "change the image" of the nation's top research institutions in the eyes of legislators. These \$500,000 Recognition Awards for the Integration of Research and Education (RAIRE) will apparently be given to 10 top research universities that have succeeded in encouraging their faculty to teach well—a situation that is "RAIRE" indeed!

It seems doubtful that this image makeover would have any lasting effect at most top universities, whose concept of integrating research and teaching has typically been to excuse their graduate students from research for a few semesters so they can be teaching assistants instead.

It may be better for the NSF to look closely at institutions that already take teaching responsibilities seriously and yet have managed to simultaneously develop admirable research programs on a shoe-string budget. At these second-tier universities, the faculty actually teach their own courses, train disadvantaged students in research, and educate the electorate on the need for science funding.

An additional \$5 million spent at these institutions would have a substantive effect on the integration of research and teaching, unlike at the "Potemkin villages" being planned for the nation's top universities.

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The article "Report urges NSF to promote teaching" by Jeffrey Mervis (News & Comment, 19 Apr., p. 345) describes how an NSF advisory panel criticized NSF for contributing to the imbalance between research and teaching. Although the report is on target, its recommendations to address the problem by shifting large sums of funds into instruction-oriented activities are neither realistic nor practical.

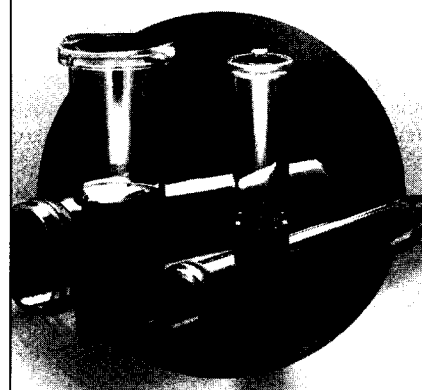
How about an uncomplicated, cost-free, and nonbureaucratic alternative? Simply require all professors applying for NSF research funding to include with their grant proposals the same student evaluations of their undergraduate classes that their departments and deans use for merits and promotions. By this one step, Melvin George, chair of the advisory panel, would begin to achieve his panel's goal of NSF sending "a message that teaching is important," and, as he anticipates, "universities will start to change their behavior."

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## Fears About Illness

It was something of a shock to read the Random Samples of 21 June (p. 1747) and find that my lecture at World Animal Awareness Week ("Disabling science: How negative stereotypes of illness have been used to promote animal experimentation") had been given the headline: "In defense of disease." As a former poster child and person with cerebral palsy, my lecture as a part of the panel on the science and ethics of

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