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Cover: Errors in computer programs that operate medical equipment such as radiation-therapy machines have been known to cause injury or death. The Food and Drug Administration is starting to take a serious look at software quality as part of its regulation of computer-controlled medical devices. What should be done and by whom are still controversial issues. (Cartoon: Sidney Harrie)

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# Letters

# Scapegoatism or scam?

As an American-born engineering professor, I have my own suspicions when I hear statements about "an undercurrent of resentment" against foreign-born engineers working in the United States" ("U.S. engineering with a foreign accent," SN: 1/23/88, p.53). Frankly, I suspect a strong current of chauvinism behind such remarks.

Perhaps I have been lucky, but the only trouble I have ever had learning from a foreign-born professor or teaching assistant is when that person would have had trouble teaching even in his own language. Let us not forget that there is a strong motivation here toward scapegoatism on the part of students, and what is worse, there is also plain intolerance.

Let me add that many of these foreign engineers are able to come to the United States only because they are the elite students in their own countries. Although they are not inherently better than our own elite, I have found that they tend to work much harder than their American counterparts. Finally, many of them are among the finest people I have ever met. Instead of complaining about them, we should be doing everything we can to entice these people to live and work in our country.

The halls of higher education are as wide open to American students who choose to enter them as they are to foreigners. Americans are simply not choosing to do so. The sad fact is that in American culture higher education, and the hard work that entails, is no longer deemed to be of great value. Perhaps we are seeing in our current economic difficulties part of the consequences of that.

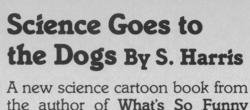
Douglas G. Talley Assistant Professor

Department of Mechanical Engineering and Applied Mechanics University of Michigan Ann Arbor, Michigan We Americans should get off our ethnocentric horse and welcome those highly able foreign graduate students in science, mathematics and engineering. I suggest the following:

- 1. Systematically recruit the best who can be found in all the world.
- 2. Require a high score say, 600 on the Test of English as a Foreign Language.
- 3. Have those who are accepted arrive, unaccompanied, early in the summer preceding their first graduate year here. Give them six to ten weeks of total immersion in the English language, stressing aural, oral and pedagogic aspects. Preferably, also provide each a roommate whose native language is U.S. English.
- 4. Urge the highest achievers to earn the Ph.D. degree.
- 5. Encourage any of the best who wish to remain in the United States and become

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the author of What's So Funny About Science?, Chicken Soup and Other Medical Matters and others. "... be prepared to laugh joyously at Sidney Harris's peculiar and special sense of fun." - from the foreword by Isaac Asimov



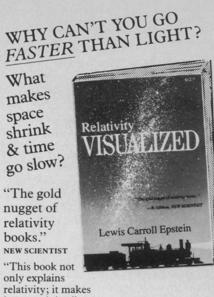
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citizens to do so.

To a great extent, our country became outstanding because of the continual arrival of eager, energetic immigrants. Initially, they have always done much of our menial labor jobs that most Americans shunned as being too laborious, dangerous or poorly paid. I suspect that many bright American college graduates now consider doctoral study and the ensuing employment as risky, too intellectually demanding and not cost-effective even in the long run. So be it. Let's be grateful for the brilliant, highly motivated foreigners who consider it a great privilege to live as graduate students for many years on a pittance and then take jobs yuppies don't want. We didn't even have to pay for their kindergarten through 16th year pregraduate education! Julian C. Stanley

Director

Study of Mathematically Precocious Youth Johns Hopkins University Baltimore, Md.

In engineering, the shortage is in jobs, not in workers. I doubt engineering is the only technical field for which general worker shortages are claimed where none exists.

By law, before you can import an alien worker you must show that "there are not sufficient workers who are able, willing and qualified, and who will be available at the time and place needed, to perform the labor or services involved" and that "the employment of the alien in such labor or services will not adversely affect the wages and working conditions of workers in the United States similarly employed" (USC 1186a).

I am an engineer with B.S. degrees in two different fields of engineering. I have now spent one-quarter of a year looking for employment. I have almost 10 years of experience and am chairman of three technical standards committees in two organizations. I have received awards for outstanding performance.

I am not alone. Engineers in other fields tell me work is tight or that they too are unem-

Foreign engineers and other technical employees are almost always imported for one reason: cost! At current levels they are depressing salaries and displacing many Amer-

Not addressed in your article is the reason why more Americans don't pursue advanced degrees. This is no deep dark secret. It is simple economics: It doesn't pay.

The large supply of foreign engineers eager and able to live and work in this country has pushed graduate-level salaries down. There are many companies anxious to hire these foreign engineers with doctor's degrees instead of Americans with bachelor's degrees, particularly for the same or less money. Why are more than half the assistant professors in our schools foreign? You can bet salary is a big part of the answer.

Many of us greatly fear that the trend of foreign domination of master's and doctor's degrees will also be repeated for bachelor's

What are the implications for this country

of a national policy that results in near-total domination of all technical fields by foreign talent? Is there more than a coincidental relationship between our increasing use of foreign technical talent and our loss of competitiveness in world markets?

Paul D. Cook Palatine, Ill.

It is true that foreign engineers accept jobs at wages far below those offered to American engineers. It may be of interest to your readers to learn how this scam works.

All foreign students are required to sign a pledge stating that they will return home after graduation. Too few do. In the years from 1951 until 1981, Taiwan sent 67,000 foreign college students to this country. Only 9,000 of them returned home. Inelegantly put, the other 58,000 simply lied.

After graduation, what is needed for these foreign students to remain here is a job. The job, and not the salary, is all-important. Unethical employers take advantage of this situation by advertising (over the name of a State Job Service) for an engineer and offering a very low wage. The State Job Services know the going wage for a typist or a truck driver, but are ignorant of the going wage for a technical professional. Thus, they accept the word of the employer who pays for the ad.

The solution is to insist that all foreign graduates return home. In this way, we will encourage Americans to again pursue technical training.

> Irwin Feerst Massapequa Park, N.Y.