Proposal to Counter Scientist 'Shortage' Draws Fire

If you're a biology postdoc in California and you're having trouble finding a job, you must be doing something wrong. According to a study done for the Labor Department, California doesn't have enough biologists to go around. It's the same story in New York, Maryland, and 14 other states. Massachusetts, meanwhile, is said to be hurting for chemists. So are five other states. And Michigan, says the same study, has run low on computer scientists and materials engineers.

You're not alone if you think this list is out of synch with the dire job market many young Ph.D. scientists now face. But the Labor Department is using it as the basis for a pilot program that would make it easier, at least for a few months, for laboratories in those states to hire foreign scientists, on the grounds that there aren't enough U.S. researchers to fill the available jobs. The department published its proposal in the *Federal Register* on 19 March. But many research groups only learned of it in the past few weeks as organizations such as the Young Scientists' Network (YSN) rushed to sound the alarm, claiming that the proposal would make an already tight job market for U.S. researchers even worse.

By now, a half-dozen scientific and engineering societies, from the American Chemical Society to the American Society of Mechanical Engineers, have written to the Labor Department objecting to the proposal, as have several members of Congress. They have all raised objections to the workforce study on which the Labor Department based its list, and they are concerned that the pilot project could lead to a more permanent easing of immigration restrictions for scientists. (The deadline for comments on the proposal has recently been extended to 30 May.)

The pilot project would temporarily permit employers in states on the list to hire foreign workers for occupations where there are apparent labor shortages, without advertising or otherwise proving they can't find an American to take the job, as they are now required to do. This project was required by Congress in the 1990 Immigration Act, as a way to ease the hiring of foreign workers in areas where there are labor shortages. Congress, in turn, was encouraged by the National Science Foundation (NSF), which, according to Charles Herz, the NSF general counsel at the time, "came in on the side of making it easier for foreign scientists to get into the country, on the argument that the country profits from that."

Last year, after a group of immigration lawyers sued to force compliance with the Act, the department commissioned Malcolm Cohen, of the Institute of Labor and Industrial Relations at the University of Michigan, to make a list of professions and geographic areas in which there was a U.S. labor shortage. And they gave him a 3-month crash deadline in which to do it. Cohen, who is a well-regarded labor statistician, used several market indicators to develop his list, including the average number of "labor certifications" that had been filed in each state for each profession. These certifications are documents filed with state labor authorities in which employers testify that they need to hire a foreign national because they cannot find a qualified U.S. worker for a particular job. Cohen also interviewed experts, including state and federal labor officials, and university administrators.

When he was done, he had a list of 10 professions matched with 23 states that were apparently undersupplied in one or more fields. Six of those professions are Ph.D.-level scientific occupations (the others range from medical technologists to Asian cooks). Heading the list: biology and the life sciences, defined as biologists, biochemists, microbiologists, physiologists, and university or college faculty members. Cohen was quick to point out in his study that it has some limitations. There was a lot he couldn't do in 3 months, he noted, including getting a perspective from employers, unions, and job seekers.

But research groups object to Cohen's study not so much for what it leaves out as for what it relies on: the use of labor certifications to measure market demand. Cohen's study assumes that employers would only go to the trouble of hiring an immigration lawyer and providing evidence that qualified U.S. workers are in short supply if that were genuinely the case. But that, researchers say, may not be a safe assumption. Although little data exist, YSN scientists offer anecdotal evidence to suggest that some research employers are willing to certify that they can't find a suitable U.S. job applicant so they can retain a foreign national who is already working at the lab on a temporary or student visa, often at a below-market salary. Cohen concedes that is a possibility, but he says better data will be needed to evaluate the issue. He says he hopes the department's move will stimulate research groups to submit such data.

To many in the science community, the "shortage" list just doesn't ring true. On any given day, Thomas Trudeau, the director of the Federation of American Societies for Experimental Biology's (FASEB) office of placement services, has about 1000 unemployed scientists on his rolls. "My perspective is that in the biological and life sciences, there have been fewer positions in the past several years, while the candidate population has remained at the same level," he says.

Nevertheless, the department is planning within the next few months to lift restrictions on hiring in the states said to have shortages. The department will report back to Congress by 1 October 1994 on how this pilot project is working out. Labor officials say that, depending on the comments they receive the list of occupations may change before the pilot project begins, and they say that there is currently no plan to relax the rules permanently.

FASEB is studying the proposed rule and is planning to comment on it. With biomedical research funding flat for the first time in years, FASEB officials are already doubtful that this is the right time to start opening the system to even more researchers. On one point, however, all the scientific and engineering societies that have responded so far agree: There may indeed be spot shortages out there, but the Labor Department's rushed statistical snapshot falls far short of proof.

–Christopher Anderson

LABOR'S "SHORTAGE" LIST

Selected science and technology categories:
Biological Sciences: California, Connecticut, Illinois, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Nebraska, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Texas, Washington.
Chemistry: California, Massachusetts, Missouri, New Jersey, New York, Texas.
Chemical Engineering: Illinois, Massachusetts, Texas.
Computer Science: Alabama, Arizona, Georgia, Illinois, Michigan, Missouri, Texas.
Materials Engineering: California, Michigan, Ohio, Pennsylvania.
Mechanical Engineering: Arizona, Texas.