Latter Day Plantations *The National Institutes of Health and the immigration economy*

by Mark Godec

This article explores the effects of immigration and job exportation on scientific research institutions in the U.S. with emphasis on the intramural research programs of the National Institutes of Health (NIH), previously regarded as one of the premier biomedical research institutions in the world.

In the past, the primary missions of universities

and the NIH were to conduct advanced scientific research for the country and to train the children of American citizens to perform such research in the future. During the decades following World War II, the medical and scientific research infrastructure of the United States grew enormously, crea-

ting opportunities for many American physicians and scientists to establish careers at institutions such as the NIH, and state and private universities. Young Americans with advanced scientific degrees were quickly promoted into permanent, well-paying jobs with substantial benefits to conduct advanced research funded by state and federal governments.

Today, a walk down the halls of the NIH or any American university reveals young foreign M.D.'s and Ph.D.'s, often from Asia, doing advanced scientific research. A survey of NIH laboratories five years ago found that approximately two-thirds of scientists doing research at NIH were foreigners. Fewer and fewer young Americans are found in research programs, especially in the basic sciences.

The ongoing importation of M.D.'s and Ph.D.'s

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The extended use of cheap foreign labor to man American laboratories is also a profound disservice to U.S. scientists and the future of American research.

into institutions such as the NIH has contributed to the current glut of scientists and physicians in this country, holding down wages and limiting opportunities for Americans. This has particularly affected the young who aspire to such research positions. Young Americans are increasingly unwilling to work at the wages being offered for scientific research, especially given the large educational debts they have often accrued in U.S. educational institutions. Immigrant researchers at

> the NIH have held down scientific labor costs to the point where licensed physicians generally start at \$30,000 a year and Ph.D.'s start at \$25,000 a year. These are token salaries, given the cost of living in the Washington, D.C. area and the educational debt that most American scientists have

accumulated. Foreign M.D.'s and Ph.D.'s trained in the Third World usually do not carry any educational debt, or if they do it is trivial in comparison with the debt load carried by Americans trained in U.S. institutions. Many graduate students and fellows training for research in the basic sciences at U.S. universities are so poorly supported that they often qualify for food stamps. This differential in educational debt as well as large differences in income expectations between foreign and American scientists drives American youth away from scientific research as an occupation.

The most devastating effect of immigration is to demoralize current and upcoming generations of American scientists who find that funds which in previous times would have supported their research in permanent full time jobs are now devoted to foreign scientists prepared to work at ever lower real wages. Junior scientists have found that their wages have not kept pace with inflated costs for homes, rent, food or other basic necessities. This means that

they are at most able to rent an apartment, drive a used car and support only themselves. A family and children are out of the question unless the spouse is also fully employed.

On the other hand, this immigrant labor pool represents a huge boon to older, established scientists at NIH and other U.S. research institutions. Special organizations within the NIH such as the Fogarty Foundation have been

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established by the federal government to fund foreign scientists in this country. Experienced scientists can quickly and efficiently exploit this pool of cheap labor to complete projects and publish papers before others can react. The usual pattern is for an older scientist, usually a white male with extensive research experience and a large research grant, to employ large numbers of the foreign scientists to conduct laboratory research. Senior American scientists spend much time writing for grants and traveling to scientific meetings to learn about ongoing research of other scientists and to hear the ideas of young American scientists. Senior scientists also spend much of their time writing papers to promote themselves and their laboratories. They spend little time actually performing scientific research. Laboratory work is performed primarily by immigrant scientists. When a valuable research project is identified, the senior American scientist brings the idea back to his laboratory and assigns several junior foreign scientists to start work on the idea immediately. With sufficient capital, labor and his own experience, the senior scientist is quickly able to complete the project and publish results before anyone else. As the scientific literature is flooded with a series of articles, the originator of the idea is often left without credit for his or her work.

Tenure entrenches senior scientists. As they grow

older, they increasingly depend on immigrant scientists to work for them. Younger scientists are forced to endure longer and longer periods of "training" at low wages before they are even considered for permanent jobs. The effect is to further demoralize and discourage young Americans from pursuing research positions.

Foreign scientists are often favored by senior American scientists for several reasons. They tend to be more docile and cooperative and will not question the authority or the scientific projects of their laboratory chief. They will generally work much longer hours in the laboratory than Americans which can help compensate for lack of expertise and poor communication skills. They generally do not have novel scientific ideas of their own and can be assigned projects by senior scientists without questioning their source or scientific merit. When they do come up with a valuable idea or project, it can easily be taken from them by the American lab chief who is skilled in writing scientific publications in English. Since foreign scientists tend to lack communication skills and knowledge of the American scientific and legal system, it is difficult for them to claim intellectual rights for their ideas.

Foreign scientists also are a great advantage to senior American scientists in that they are more "disposable" than junior American scientists. If foreign scientists are not working hard enough, if they are not intelligent enough, if their communication skills are so poor that meaningful laboratory work is not possible, or if they become too independent or demand too much salary or resources, then the simple solution is to immediately withdraw support from the foreign scientist and send him back to his or her native country. Since most of these immigrant scientists are from the Third World, this threat carries a very powerful incentive to perform immediately and continuously from their arrival in this country.

For many immigrant scientists, the primary goal is not advanced scientific research, but to remain in the U.S. and avoid returning to their country. Fear of returning to the Third World is a whip as potent as any used on plantations of the pre-Civil War American South. Combined with the carrot that they may be allowed to stay in the U.S. if they can satisfy the demands of their laboratory chief, there is potent motivation for immigrant scientists to work

very hard at very low wages. One interesting solution that many foreign scientists follow is to have children while in this country temporarily which makes their children U.S. citizens. These children can later be used to gain permanent status in the U.S.

Just as foreign scientists can be brought into the U.S. to perform work, research jobs can also be exported to other countries to reduce labor costs. With increasing frequency, scientific projects and funds are sent from the NIH and American universities to collaborators in the Third World. This frees U.S. scientists from problematic regulatory oversight, especially when human subjects are involved, and allows access to scientists in the Third World as a low cost source of labor.

Plantation Science

Initially, research conducted in this "plantation" system appears efficient since research projects are brought to completion more quickly through the combination of senior scientists with extensive

experience and a large supply of cheap labor from immigrant scientists. Over the long term, this pattern is having a devastating effect on American research as older American scientists eventually retire and there is an insufficient number of highly trained and motivated junior American scientists with extensive research experience and communication skills to replace them. A system of

scientific research based on exploitation of immigrants will eventually lead to technological stagnation, as occurred in the American South prior to the Civil War.

This type of research leads to disasters such as occurred in the 1980s when the original isolate of the AIDS virus from Luc Montagnier's group at the Pasteur Institute in France was stolen by foreign scientists working in the laboratory of Robert C. Gallo at the NIH. Desperate to isolate the virus that causes AIDS but technically unable to achieve isolation of the virus from AIDS patients, these scientists borrowed specimens from the French group and then claimed isolation of the virus from the French specimens. This claim was accepted for a while allowing the scientists to publish articles and

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file patents from the NIH. Eventually, closer inspection of the NIH viral isolate showed it to be identical to the French virus leading to long court battles over the patents and federal investigations of the research performed at the NIH.

Diversity is a Weakness

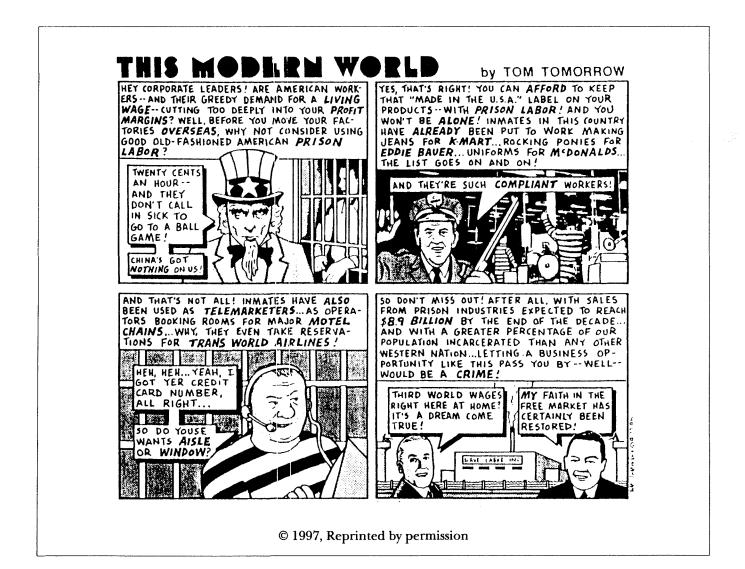
Diversity in American society is not a strength, it is a weakness — a weakness that allows those in the upper classes to exploit those below by pitting diverse groups against each other for jobs, capital and resources. Increasing diversity has led to disparities of wealth and growing social problems in our country. It is emblematic of weak leadership that it uses this diversity to divide and conquer those below them. At the NIH and other research programs, diversity has led to the fragmentation and balkanization of research initiatives as well as poor communication and coordination between scientists, both foreign and American, charged with performing research.

> The NIH and American university research programs were once great centers of advanced scientific research which stood as beacons of pride and hope throughout the world. A few universities have been able to maintain their preeminence. Unfortunately, we have built a modern tower of Babel at the NIH and in many of our academic research programs. We have brought

together people of many nations speaking many different languages and with many different motivations - brought them together to achieve difficult goals while lacking the fundamental tools of communication and cooperation. Like the tower of Babel, our research institutions are doomed to failure if we persist in following the plantation system in our scientific endeavors. Money that might have been used to train a new generation of American scientists has instead been diverted to the development of scientific plantations at the NIH and academic research institutions. The short-term savings in labor costs are minimal in comparison with the enormous long-term damage of losing a whole generation of trained and motivated American scientists.

Long before the American Civil War, Richard Allen, founder of the African Methodist Episcopal Church, said, "If you love your children, if you love your country, if you love the God of love, clear your lands from slaves, burden not your children or country with them." These words again ring true today in our immigration-based and import-based economy. Immigration and job export have brought wealth to a few but have greatly damaged the economic prospects of many others, especially our children. Even jobs in the U.S. once sacrosanct from this process, such as scientific research and medicine, are open to the low bidder on a global basis. American children will not put themselves deeply into debt for a long and difficult education in the U.S. when it is possible to bring talent from the Third World to fill technically advanced positions at very low costs.

Further, any nation that believes it can hire people from other countries to do its thinking for it, no matter how cheaply they will work, is in serious trouble. America cannot abandon advanced scientific research to the low bidder from the Third World. This may work for road building, ditch digging or even simple manufacturing, but it cannot be applied to truly innovative thought in advanced scientific research which relies on communication and cooperation. We must change our current system of scientific research, based on exploitation of immigrants, and return to training Americans with a common language and the vision to carry American research into the future.



Immigration's Role in the **U.S. Computer Industry** Bottom line: lower salaries, other cost savings

by Norman Matloff

mericans tell their children, "If you study hard, go to college, and major in a professional field, you will have a reasonable chance for a fine career." Yet such words have a hollow ring for Cindy, a computer programmer who did all the right things and yet in 1994 found herself cast aside, unemployable, at the age of 35. (All persons identified here by only a given name or only a surname have had their names changed to protect their privacy.)

Cindy has been unable to find work as a computer programmer since being laid off by a major firm in Silicon Valley. Yet the same employers who reject her are filling their programming jobs with foreign nationals. The employers, whose public relations experts have heavily lobbied Congress against tightening of skills-based immigration policies, say that Cindy's skills are outdated.

Sharon Gadberry, president of Transitions Management/Outplacement National notes that job ads will specify five years of experience — "they usually mean no more than that." She explains that "companies are trying to screen out the older workers." A major motivation appears to be that fresh graduates are cheaper, with foreign nationals being the cheapest of all. A statistical analysis performed by the author on the 1990 Census data revealed that average salaries for foreign-born computer professionals in Silicon Valley were nearly

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\$7,000 lower than among natives of the same age and level of education.

The industry's claim that the issue is skills, not salary, is unwarranted. Even Bill Gates of Microsoft says that general programming talent is far more important than background with a specific software technology. (See his quote in the point-by-point summary below.)

The issues here go directly to the middle class' growing feeling that the American Dream is no longer within reach. According to a November 27, 1995 poll in the San Francisco Chronicle, a prime worry among Californians today is that there will be no jobs for their children when they grow up. How can we implore our computer science students to study hard today, knowing that they, too, are likely to be discarded a few years from now — like Cindy? Even the foreign nationals are victims. Assuming they gain immigrant status, as is typical, then five or 10 years from now, the same "special skills" for which they are hired today will be obsolete, and then these people too will become victims of this throwaway-worker Ponzi scheme.

A quick summary of the situation is as follows.

Item: The computer industry does not need to hire large numbers of foreign nationals, either for the sake of quantity or quality:

• There is a labor surplus in the field.

• The vast majority of major technical advances made in the industry have been made by U.S. natives, not immigrants.

Item: The large number of foreign nationals being hired is due to these main factors:

• Some unscrupulous employers wish to save on salary costs, and foreign nationals, in exchange for a green card, are willing to work for lower salaries.

• Some sincere but misguided employers have placed an unwarranted emphasis on hiring people with very highly specific skill sets, thus creating an artificial labor "shortage."