U.S. Foreign Medical Students: After the "Guadalajara Clause"

The latest evidence of the pertinacity of Americans studying in foreign medical schools with the intention of eventually practicing medicine in the United States is a bill passed by the Washington State legislature and now awaiting action by Governor Dixy Lee Ray.

Unless Ray vetoes it, the new law will require that the medical school of the University of Washington fill all vacancies in its third and fourth year classes with state residents who are students in good standing in medical schools abroad and who have passed part 1 of the national board examination which covers the basic science portion of the medical curriculum.

Ray is under heavy pressure to sign from proponents of the bill, which is opposed by medical school and university officials. Passage of the measure followed a year of highly emotional and effective lobbying by partisans. The Washington law is a sign of a phenomenon that has assumed national dimension since competition for places in U.S. medical schools increased drastically in the 1960's. Although no firm data are available, the number of U.S. citizens studying medicine abroad is estimated at more than 5000.

Nationally, the medical schools were apparently caught unawares last fall when Congress voted an amendment to the Health Professions Educational Assistance Act (*Science*, 12 November 1976) requiring, as a condition of the schools' receiving federal capitation grant payments, that U.S. medical schools admit American medical students enrolled abroad who could pass part 1 of the national board examinations. No other academic qualifications are to be considered. The law would be in effect for 3 years.

There was sharp reaction from a few medical school deans and university presidents, who protested federal intrusion on the schools' prerogatives of applying their own admissions criteria. They also argued that it was unfair to other American applicants who, like many of the Americans abroad, had been rejected by American medical schools. And there were misgivings about the quality of the training that Americans were receiving in some foreign medical schools. Some schools indicated that they would consider renouncing the capitation grants unless the new provision was modified.

Now, however, the original sponsor of the amendment, Representative Paul G. Rogers (D–Fla.), chairman of the House subcommittee that handles health manpower legislation, has indicated that he will seek to modify the amendment. His aim, he said in a "Dear Colleague" letter addressed to potential cosponsors on 20 June, is "to make the provisions more feasible to administer, remove the features to which medical schools object, and still retain the basic features of the requirement: facilitate the entry of qualified U.S. foreign medical students into U.S. medical schools."

Mandate for Expansion

The amendment would mandate that schools expand third year enrollment by 5 percent or 10 students, whichever is greater, but would remove the requirement that the individual school set aside its own admissions criteria for foreign-trained U.S. students. It is assumed that the modified law would achieve its original purpose because the applicants for admission to the positions created in the third and fourth years of medical school here would be predominantly students in foreign medical schools. As one dean put it, "the law would create a vacuum which would suck in the students from abroad."

At this stage, it is unclear what effect Roger's proposal will ultimately have, but it seems to be getting a cautious welcome in the medical schools. David R. Challoner, dean of the St. Louis University medical school, who has recommended to his board that the institution not accept capitation funds unless the law is modified, says he feels that Roger's proposed change in the law "amends it very significantly" since it seems to permit the medical school to review the academic qualifications of the applicant.

Whatever happens to the proposal, the small but potent pressure group which operates in behalf of the American medical students abroad is not expected soon to leave the field.

Emergence of this group as an active lobby occurred relatively recently. Historically, small numbers of Americans have chosen to study medicine abroad, particularly in Western European countries. As competition for admission to U.S. medical schools grew intense, larger numbers of Americans sought medical training outside the United States in countries such as Italy, Belgium, and France. They were attracted by the national university systems which offered the advantages of comparatively low cost and virtually open enrollment. More recently, American students began to find their way to medical schools outside Europe, for example, in Mexico and the Philippines. The medical school of the Autonomous University of Guadalajara in Mexico, in fact, has the largest enrollment of American medical students of all foreign schools.

Faced with overcrowding and the demands of their own nationals for medical training, Western European countries in recent years have moved to restrict free access to Americans and other foreigners. Within the last month, for example, Italy has announced it will exclude foreign students from entering classes in its universities for at least the next 2 years.

As access to popular foreign schools has been restricted, Americans have gone ever farther afield, even establishing a small beachhead in medical education in Eastern Europe. As a result of the improvement in relations between Rumania and the United States, U.S. students are now being permitted to study in Rumanian medical schools. From a single student in 1972, the number has reportedly increased to 86 Americans this year in Bucharest and Cluj.

This dispersion has brought developments that have caused concern among authorities in American medical education. Particularly worrying is the appearance of schools abroad which are of substandard quality and seem to be designed specifically to attract Americans capable of paying high tuitions. Recently, attention has been drawn to new schools in the Caribbean, which depend on newspaper advertising in the United States to gain the notice of potential students and often demand large lump sum payments of tuition on acceptance to the school.

One school currently under scrutiny is the medical school of the University of Borinquen in Puerto Rico, which is scheduled to open this September. An administrative complaint has been filed

against the school by the U.S. Postal Service and a temporary injunction putting a hold on all incoming mail has been obtained.

A hearing is scheduled before a Postal Service administrative law judge on 19 July. Charging false representation in the school's advertising, the Postal Service is seeking to show that promises made by the school are unlikely to be fulfilled.

The university itself, which advertises branches in three Puerto Rican cities, is a technical school which emphasizes computer and electronics training. The Postal Service case is based in part on an affidavit from James R. Schofield, director of the division of accreditation of the Association of American Medical Colleges (AAMC), who visited the school this spring. Schofield has been quoted as saying that the school had not begun to do many of the things necessary for the establishment and operation of a medical school. At the time of his visit, staff had not been appointed and adequate physical facilities were not available.

Other new medical schools in Puerto Rico are under scrutiny. The AAMC accreditation process provides a screening mechanism for schools on U.S. territory but not beyond. So there is an increasing number of what might be called flag-of-convenience medical schools. New schools in the Caribbean, notably in the Dominican Republic and Grenada, are said to be profit-making enterprises designed to appeal to Americans.

The return flow of American medical students has required construction of a new apparatus to test and certify those who meet U.S. standards. The most common path to certification has been for the foreign medical graduate to take the examination of the Educational Commission for Foreign Medical Graduates (ECFMG). Success in the exam is required for the licensing of FMG's in most states.

Increasingly, however, Americans studying abroad are not completing their training, but rather are seeking to return to the United States as transfer students in the later years of medical school. The advantages of acquiring an American M.D. are regarded as substantial; clinical training in the U.S. is thought to be generally better and to make possible more desirable placement for specialty training. An even more practical reason is that some countries, notably Mexico, require a period of social service from medical graduates, and Americans tend not to think of a year or more of village medicine as ideal postgraduate medical education. Third-year entry into U.S. medical schools is, therefore, seen as particularly desirable by U.S. students in Mexico. Because of the large and well-organized contingent of Americans at Guadalajara, in fact, the controversial provision in the 1976 health manpower act is commonly called "the Guadalajara clause."

The growing demand among Americans abroad for transfer to U.S. schools during the undergraduate years has required a new helping of alphabet soup to deal with it. The students themselves are called USFM's (U.S. foreign medical students), for short, which seems to conceal a contradiction, real or apparent.

Years before the Rogers initiative, in 1970 to be exact, the medical education establishment devised the coordinated transfer application system (COTRANS), designed to assist in the educational repatriation of Americans to U.S. medical schools. COTRANS is a cooperative effort by the AAMC and National Board of Medical Examiners. Administered by the AAMC, COTRANS determines the eligibility of students to take part 1 of the national boards, sponsors the exams, and makes test scores available to interested medical schools.

Returns of the Natives

Data from COTRANS provide some idea of how the expatriate students are faring in their efforts to gain entry to the system here. Figures for 1975 and 1976 published in an article in the April issue of the *Journal of Medical Education* shows that over the 2 years, 1516 took the 2-day exam and 836 passed it. There were 377 successful examinees in 1975 and 459 in 1976, the largest number since the program started.

Of the 644 students who took the examination in 1975, 286 had studied in Mexico, 120 in Belgium, 88 in Italy, 51 in the Philippines, 39 in France, 23 in Spain, and 18 in Switzerland. In 1975, 243 were admitted by U.S. medical schools and in 1976, 373.

Some idea of the academic quality of the USFMS's is provided by a comparison of scores with students in U.S. medical schools. In 1975, 62 percent of the COTRANS examinees had originally applied to U.S. medical schools for admission in the 1973–74 year. The mean score, 531, of the COTRANS applicants in the science subsection of the Medical College Admissions Test was slightly above the 524 mean for the entire non-accepted group. The mean COTRANS undergraduate grade point average (GPA) was 2.79, slightly below the mean of 2.95 for the whole group. COTRANS applicants who passed part 1 had MCAT mean scores of 553 and GPA means of 2.81. These were below the comparable mean scores of applicants accepted by medical schools in 1973–74 (MCAT science, 592; GPA, 3.38).

COTRANS is perhaps the most visible sign of the medical schools' effort to accommodate the Guadalajara generation. The responsiveness of the medical schools has unquestionably been conditioned partly by the effectiveness of the lobby. Americans who study medicine abroad are, of necessity, almost all from affluent, middle-class families. The group has demonstrated an influence with federal and state legislators far out of proportion to its numbers.

The USFMS's cause, however, has been helped by circumstances. Starting in the early 1960's, legislators were told that there was a shortage of physicians, particularly in rural areas and the inner city and in the so-called primary care specialties. At the same time, foreign nationals trained in medical schools abroad were filling half or more of the staff positions in American hospitals.

It was argued in behalf of the USFMS's that they should be welcomed to U.S. medicine to redress the balance. Legislators were susceptible to the argument since they were hearing complaints from constituents who lived in places without physicians and also from influential supporters who wanted their own sons and daughters and nephews and nieces, or those of their friends, to have a chance to be doctors.

The hearings before the Washington State legislature demonstrated the ability of the proponents to capitalize on these arguments and also to dramatize the hardship caused by the separation of students from their spouses and children. The bill was almost defeated several times in its passage through the Washington legislature and finally was passed on the tie-breaking vote of the lieutenant governor in the state senate; it appears that the lobbying effort was just enough to carry it through.

The atmosphere may be changing. Warnings are multiplying that the physician shortage may become an oversupply. Measures are being taken to restrain the flow of FMG's into this country as a result of provisions in the same bill that carried the Guadalajara clause. And the publicity on the new instant medical schools could injure the image of the USFMS's.

U.S. medical school officials have been reluctant to set a collision course on the USFMS issue with legislators who have, by and large, been sympathetic to medical school problems and rela-

tively forthcoming with funds. The AAMC, for example, has avoided a hard line on the Guadalajara clause, though its constituent schools are restive.

Because of multiple uncertainties, current proceedings have a certain Lewis Carroll quality. The first crop of USFMS's to fill positions reserved for them under the new federal law are scheduled to enroll a year from September. (A suit seeking to speed up the process by a year was recently lost in federal court in Philadelphia.) The Secretary of Health, Education, and Welfare is charged with identifying students eligible under the new provision. The deadline for applications is 1 August and, when HEW has them sorted out, it will be clear just how many students are eligible, a question that has kept some medical school officials in a state of nerves. The schools will then reserve positions as apportioned to them by the Secretary. Students will apply to the schools of their choice, and participating schools will list applicants in order of a school's preference.

Students must apply by 15 December, and a "match" of applicants and schools is to take place in March, with the HEW Secretary acting as matchmaker. A list of unfilled reserved positions will then be published, and students not then admitted may seek the unfilled positions.

It may all sound logical and orderly, but the first trial of the new and complex process is expected to produce problems for everyone involved. One major complication, of course, is the stance of the medical schools who say they will forego the capitation payments and not take their quota of USFMS's unless the amendment is modified. These schools are apparently applying for the capitation grants in the hope that the law will be changed by March. The chances of that occurring are judged uncertain. Rogers is planning to introduce separate legislation to effect the change he seeks, and it is difficult to predict what will happen as such a measure passes through the committee process and floor debate.

As things stand now, it appears that even if the provision is modified, for the next 3 years the HEW Secretary will chair the most influential medical admissions committee ever.—JOHN WALSH

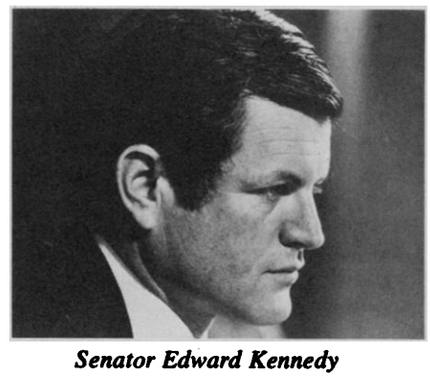
Gene Splicing: Senate Bill Draws Charges of Lysenkoism

Considerable friction has been generated between Senator Edward Kennedy and part of the scientific community over the issue of recombinant DNA research. "It smacks of Lysenkoism," says a senior scientist of the legislation drafted by the staff of Kennedy's Senate health subcommittee. "We are being hassled out of existence for no reason at all," complains Walter Gilbert of Harvard. Kennedy's staff, on the other hand, says the bill establishes a minimum regulatory apparatus which is designed to wither away if scientifically unjustified.

Scientists' apprehensions about the bill have been amplified by Americans for Democratic Action, a liberal Democratic pressure group. On the initiative of a scientist member who cited the Kennedy bill, the ADA board recently adopted a resolution warning that Congress is "attempting to control specific activities through individual licensing and punitive action." Strict societal control of science, the resolution avers, has in the past preceded such excesses as Lysenkoism and "some of the inhuman practices in Nazi Germany."

The frustration behind these sentiments derives from fear that the impending legislation will set up a vast and cumbersome bureaucracy which will seriously impede research. Some scientists opposing the legislation consider it so restrictive as to constitute "prior restraint," a practice abhorred by civil libertarians in freedom-of-speech issues. Others fear that control of recombinant DNA research is only the tip of the iceberg, and that other techniques, such as cell fusion, will be next to be regulated. "It is clear that there are a whole bunch of regulators here who have discovered that we have been doing genetics for 30 years without permission. For a scientist that sounds hilarious, but they are dead serious," says an MIT biologist.

Resentment of the Senate bill on gene splicing has been compounded by a separate development, the emergence of a belief that the originally perceived health hazards of the research, which the present NIH regulations are designed to address, have been overestimated. Though much of the knowledge underlying this evaluation has been available for several years, it seems first to have been brought together this April by an individual member of the NIH committee which drafted the regulations. The review is in the form of a widely circulated letter from Roy Curtiss of the University of Alabama to the director of NIH. It lays out the evidence which persuaded Curtiss to change his position on the possible health hazards of the research from one of greater to lesser concern.



Senator Edward Kennedy

"I have gradually come to the realization that the introduction of foreign DNA sequences into EK1 and EK2 host-vectors offers no danger whatsoever to any human being," except in very special circumstances, Curtiss writes: "The arrival at this conclusion has been somewhat painful and with reluctance since it is contrary to my past 'feelings' about the biohazards of recombinant DNA research."

"The Curtiss paper has had a big impact because he started from the other side and is a very credible guy," observes Alexander Rich of MIT. One important impact of Curtiss's palinode has been on the NIH Recombinant DNA Committee. At meetings held in May and June the committee recommended reducing the stringency of its guidelines in several respects (human shotguns to be permitted in P3 physical containment instead of P4; all P4 experiments to be permitted with only an EK1 host-vector). According to an account of the June meeting in the *PMA Newsletter*, the