Reflections of Twenty-Three Years......

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YOU HAVE TRULY HONORED ME by electing me President of the Midwest Surgical Association. It is an honor that will always be a high point in my life. Two past presidents, Clark Herrington and Bill Baker, must share in this honor because it was during their tenures as president that I became councilor and secretary of the association, respectively. I must confess that I have no solutions to offer you for the major problems facing U.S. medicine today, and so I choose to make a few remarks that cover the 23 years I have spent in this country. Specifically, I wish to talk about other foreign graduates like me who have remained in this country and are members of academic surgical institutions. In addition, I would like to make some remarks about the Exchange Visitor Program under which I first came to this country. Before I do, however, I would like to make mention of three individuals who were instrumental in helping me get started on my surgical career. The first, Charles B. Puestow (Fig. 1), established the residency program in surgery at Hines V.A. Hospital in 1946 after he returned from World War II. He was also the first chief of the service. From 1946–1973, when the program at Hines became affiliated with the Stritch School of Medicine at Loyola, Hines had trained more surgeons in the United States than any other program except for the Mayo Clinic. I was one of the last eight residents Dr. Puestow appointed and began my surgical residency at Hines V.A. Hospital on July 1, 1971. Dr. Puestow had the foresight to appoint Dr. Herbert B. Greenlee (Fig. 2) to be assistant chief of the surgical service at Hines V.A. Hospital in 1967. I say foresight, because it was Dr. Greenlee who took over for Dr. Puestow as chief at Hines in 1972, and I am sure it is Dr. Greenlee's personality that allowed for the smooth negotiations when the programs at Hines and Loyola merged in 1973. After finishing my residency at Loyola in 1975, I took a fellowship in surgical oncology at the University of Minnesota, coming under the guidance of Drs. Theodore Grage, Richard Simmons, and Charles Mc Khann. In 1976, I met Dr. Greenlee at the American College of Surgeons meeting in Chicago and asked him about a position the following July when I finished my fellowship. He said he would talk to Dr. Robert Freeark, the Chairman of the Department of Surgery at Loyola, and get back to me. Within 4 weeks I had a letter from Dr. Freeark offering me a faculty position in the Department of Surgery in the Stritch School of Medicine and a staff position at Hines V.A. Hospital. There could be no better person than Robert J. Freeark to take over the Chairmanship of the Department of Surgery at Loyola in 1970 (Fig. 3). His skills as an administrator and surgeon are well known. He is the ideal chairman for a young surgeon starting out on his surgical career because he is so supportive of one's endeavors. During his tenure, the number of faculty in the surgical department has increased from four to a total of 40 full time members, and the surgical program has expanded to include Hines V.A. Hospital and two major suburban hospitals. Loyola's residency program in surgery is highly rated and sought after in the USA.

I came to this country along with my wife Rose on January 13, 1970. We were married on January 3, 1970. Before that I had gone to Sri Lanka (Ceylon) in February 1969 to take the examination of the educational commission for foreign medical graduates (ECFMG), a one-day affair that any person going to medical school outside the United States had to take and pass if they wanted to join a residency program in surgery in the United States. The visa under which I came was a J-1 or exchange visitor visa. Not all exchange visitors came to train. Many came as observers and visitors to medical schools and spent only about 3 months to a year. In fact, in 1979 of the approximately 70–80,000 exchange visitors present in the United States, 4500 were physicians, of which 2500 were new entrants and only 400–600 entered residency training.[1] Most of those who did not enter residency training returned to their countries after spending a specific period of time gaining medical ex-

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FIG. 1. Charles B. Puestow, M.D.

FIG. 2. Herbert B. Greenlee, M.D.

FIG. 3. Robert J. Freeark, M.D.

perience. After finishing my residency at Loyola, I took a fellowship in oncology at the University of Minnesota in preparation for the practice of surgery and surgical oncology. However, my two years at the University of Minnesota changed my thinking completely. The proceedings there of the department of surgery under the chairmanship of John Najarian, including teaching, research, clinical and conference give and take, made being in academic surgery so attractive that I decided to stay in academic surgery. So the opportunity to join the faculty of the Department of Surgery at Loyola came at the right time to satisfy that decision. How many other foreign medical graduates have remained in academic general surgical programs around the country? The first portion of my remarks will be directed to this question. A questionnaire was sent to chairman of 134 departments of surgery in the United States, including all 127 medical schools and major clinics. The questionnaire requested information on faculty members who had gone to medical school in a foreign country in relation to their position, school, year of graduation, expertise, and date of appointment. A total of 105 replies (78.3%) were received. Ninety (85.7%) of those who replied had at least one foreign graduate on their faculty, and fifteen (14.2%) had none. A total of 466 individuals were identified, and they come from 66 countries. Asia with 131 has the most individuals followed by Europe 99, North America (Canada and Mexico) 59, Middle East 57, South America 49, Africa 45, Australia and New Zealand 9, West Indies 6, Central America 5, and in 6 the country of origin was not stated. The five major countries represented are India 61, Canada 51, United Kingdom 26, South Africa 23, and Lebanon 21. Two hundred twenty of the 466 individuals are in general surgery or its sections (endocrine, trauma, colorectal, laparoscopy, nutrition, vascular, oncology, endoscopy, etc.), 61 are in cardiovascular surgery, 39 in transplant, 26 in research, 30 each in urology and plastics, 26 in neurosurgery, 14 in orthopedics, 9 in otolaryngology, 5 each in burns and head and neck surgery, and 1 in ophthalmology. These numbers, of course, are the minimum because cardiovascular, neurosurgery, urology, otolaryngology, ophthalmology, and orthopedics are free standing departments in many medical schools. A total of 136 of the foreign medical graduates are professors, 17 clinical professors, 98 as-

sociate professors, 21 clinical associate professors, 129 assistant professors, 41 clinical assistant professors, 8 instructors, 6 clinical instructors, 7 associate scientists, 1 teaching assistant, and 1 visiting fellow.

How are the graduates distributed in the United States? There are 94 foreign medical graduate faculty in 14 institutions in the mid Atlantic states (NY, NJ, PA, DC), 141 in 28 institutions in the Midwest (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI), 52 in 9 institutions in New England (CT, ME, MA, NH, RI, VT), 46 in 8 institutions in the Pacific coast (CA, OR, WA), 3 in 1 institution in the Rocky Mountain states (CO, ID, MT, NV, UT, WY), 84 in 22 institutions in southern states (AL, AR, DE, FL, GA, KY, LA, MD, MS, NC, SC, TN, VA, WV), 24 in 7 institutions in southwestern states (AZ, NM, OK, TX), and 22 in Hawaii.

According to the American College of Surgeons, there are 43,199 members of the College, of which 6,527 (15.1%) are graduates of foreign schools. These 466 make up 1.0 per cent of the members of the American College of Surgeons. Of the 466, 11 (2.3%) have been or are department chairmen. Eighty-nine of the 466 (19.1%) were thought by the Loyola faculty to be nationally and/or internationally known in their area of practice. One can see, therefore, that the contribution of foreign medical graduates to American surgery has been substantial.

As stated earlier, I came to the United States as an exchange visitor in 1970. What has happened to the exchange visitor program in the last 23 years is the subject of the next part of my address. To answer that question one needs to look at both the history of the ECFMG and graduate medical education in the United States. First a look at the ECFMG. The ECFMG was established in 1958 with the purpose to assess readiness of foreign medical school graduates (FMG) to enter accredited clinical residency or fellowship programs in the United States. The first exam was given by the ECFMG in 1958 to 298 examinees in 17 test centers around the world. In July 1991, the test was given to 17,950 examinees in 146 countries. From 1958 to 1991, 446,784 candidates have been examined and over 100,000 certified from over 100 countries.[2] The examination consisted of a one-day test of medical knowledge and English from 1958 to 1977. From 1977 to 1984 the exam was called the Visa Qualifying Exam (VQE) and consisted of a 2 day test of basic science, clinical medical knowledge, and English. From 1984 to 1993, the exam was called the Foreign Medical Graduate Exam in the Medical Sciences (FMGEMS). From 1993 the exam will be called the United States Medical Licensing Exam (USMLE), a two-step exam which is the same exam that will be given to graduates of U.S. medical schools before they enter residency. For the first time the same exam will be given to those graduates of U.S. medical schools and foreign medical schools.

From 1958 to 1984, 128,274 certificates were issued by the ECFMG (average 7000 per year). From 1985 to 1991, 29,373 certificates were issued (average 4500–4700 per year).[2] Why the decline? To understand the decline one must look at the history of medical education in the United States. In colonial days when one wished to become a physician, one returned to England for education.[3] The first medical school was established in the United States in 1765 at the University of Pennsylvania School of Medicine in Philadelphia. This was followed in quick succession by medical schools at Kings College in New York and Harvard in Boston.[3] Until the American Revolution, medicine in the United States was influenced by the British system. In 1776, with the break with Great Britain and with friendships made with France during the American Revolution, U.S. medicine came under the French influence and continued so until the time of the Civil War. In 1861 there were 65 medical schools in the United States.[3] However, these schools were mainly expanded preceptorships rather than formal educational institutions.[3] At the end of the Civil War it became clear that the high numbers who died from disease or injury during the war reflected a major deficiency in U.S. medical training. It was in 1876, to reform medical education, that the Association of American Medical Colleges (AAMC) was established by representatives of 22 medical schools. From 1870 to 1914, U.S. medicine came under the German influence. In fact it has been shown that from 1870 to 1914, 15,000 Americans studied at German-speaking institutions in Germany, Switzerland, and Austria. Major figures from that era who went to Germany to study were Alton Oschner, William H. Welch, and William Halstead.[4] Alton Oschner later came back to found the Oschner Clinic in Louisiana, and William H. Welch came back to found Johns Hopkins University in Baltimore, Maryland. From 1914 to 1945, the U.S. was established as a leader in medical science and teaching. Both World War I and World War II had caused major problems with the medical systems in Europe. Having now become recognized as one of the major centers for medical science and teaching, the United States began to attract physicians from other countries for study. This resulted in 1948 with the setting up by the AAMC of the Committee on International Relations in Medical Education.[3]

With the end of World War II, there was a great expansion of accredited internships and residencies to accommodate veterans returning from World War II.[5] When the veterans finished their training, the positions

remained but could not be filled with the number of graduates being graduated from U.S. medical schools at that time. Thus it was concluded that there was a shortage of physicians in the United States. Laws were passed making it easier for foreign medical graduates to be admitted to the United States for training under the J visa or exchange visitor program and for exchange visitors to become citizens (PL89-236 and PL91-225).[6] Between 1962 and 1975, 47,000 foreign medical graduates were admitted to the United States. Meanwhile, from 1963 to 1976 the numbers of medical schools in the United States increased from 87 to 116, and the number of graduates increased from 7,300 to 13,600.[7] Therefore, in 1976 it appeared that we were heading for a surplus of physicians in the United States. This coupled with cries of "brain drain" from other countries resulted in the passage of the Health Professions Educational Assistance Act of 1976 (PL-94-484) that created strict examination and entry requirements for foreign medical graduates wishing to enter the United States for medical training.[6] This was followed by the passage of the Consolidated Omnibus Budget Reconciliation Act (COBRA) (PL-99-272) limiting medicare graduate medical education payments to hospitals whose residents had successfully passed the Foreign Medical Graduate Examination in Medical Sciences (FMGEMS).[6] These two last laws had a dramatic effect in the numbers of exchange visitors entering the United States for clinical medical training. In 1973 there were 9500 exchange visitors in clinical training programs in the United States. In 1982 there were only 1552 exchange visitors. In addition, there were 5863 who entered as immigrants.[1] In 1986, fewer than 3% of residents were exchange visitors.[3] The result of both laws was decreased physician immigration and a decreased number of exchange visitors entering the United States. While the effect of both laws was the restricted entry of foreign doctors wanting training in the United States, they did not differentiate between physicians coming as immigrants and those who wanted to study medicine in the United States before returning to their country. The laws also forced all foreign medical graduates seeking advanced medical training to enter either a residency program or a graduate school in the United States. This resulted in many foreign graduates seeking training in other countries, mainly Communist bloc nations.[6] Consequently, the feeling that the United States was becoming isolationist in medical education pervaded medical communities in foreign countries.[6] Could the United States, a leader in medical science and teaching whose medical past was influenced by England, France, and Germany afford to turn its back on the rest of the world? Attention was now given to undo some of the undesirable effects of PL94-484 and PL99-272.[6] It appeared that a distinction had to be made between those physicians coming to the United States as immigrants and those who wished to come to the United States for medical studies before returning to their countries. There was no argument that those who wished to migrate would need to pass an examination. However, for foreign medical graduates with significant prior experience in their country who wished specialized training in the United States in the areas of medicine, health administration, and public health to have to go through an examination was thought to be inappropriate. To help remedy this situation, the International Medical Scholarship Program (IMSP) was set up in 1988.[6] The program is geared toward those physicians who reside outside the United States and wish to come to the United States to receive advanced medical training other than entering a residency program or graduate school. Individuals acceptable for the program would have to have not less than 2 years' work experience in their chosen field, a graduate or professional degree in their area of study, endorsement from their home country institution, be proficient in the English language, and intend to return to the organization or institution of origin.[6] The International Medical Scholars Program is presently funded by the Association of American Medical Colleges, the American Hospital Association, the Rockefeller Foundation, the ECFMG, and program directors interested in the program. So far since its inception in 1988, 40 fellowships have been issued.[8] It is anticipated that when fully working, the program will have 1500 fellowships per year for study in the United States.[6] It is hoped that with time, all 127 medical schools and major clinics in this country will participate in the program. This would be essential if the program is to succeed, and America should be able to share its knowledge with the rest of the world. Because of its preeminent position in medical science and teaching, the United States will continue to attract physicians from all over the world for medical training and experience. Preaching on the deck of the ship Arbella that had just arrived in Salem Harbor from England in 1630, John Winthrop, the first governor of Massachusetts said: "We shall be like a city upon a hill; the eyes of all people are on us." Such has been the case for the last 363 years, and I think will be the case for the foreseeable future.

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