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ABSTRACT

Even though each medical school has its own unique qualities that distinguish it from another, differences can be examined in terms of faculty and school characteristics. Two general questions are pursued in the present report: (1) What are the mobility patterns of medical school faculty members as revealed through an analysis of faculty characteristics? (2) What are the mobility patterns of medical school faculty members as revealed through an analysis of institutional characteristics? To answer these questions medical school faculty are divided into four groups--new hires; transfers; stayers, and leavers--on the basis of mobility status. Medical school faculty in the four mobility status groups are then compared in terms of the following characteristics: age, sex, country of training, academic rank, nature of employment. Also included are two characteristics of the medical schools--ownership and age. (Author/KE)

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MOBILITY

CHARACTERISTICS

OF U.S. MEDICAL

SCHOOL FACULTY

Prepared by the Association of
American Medical Colleges (AAMC)
under Contract number NIH 72-4401

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Effective May 5, 1975, a reorganization of the Health Resources Administration divided the former Bureau of Health Resources Development into two new components - the Bureau of Health Manpower and the Bureau of Health Planning and Resources Development. The material described in this publication was prepared in BHRD, and now falls within the purview of the new Bureau of Health Manpower.

AAMC Faculty Mobility Series: Report 1
Mobility Characteristics of U.S. Medical School Faculty

In Calendar 1971

Philip W. Anderson, Ph.D.
Thomas A. Larson

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FOREWORD

A major mission of the Bureau of Health Resources Development (BHRD)* is assuring the development of an adequate supply of well-qualified health manpower for the Nation. To help carry out this mission, the Bureau provides financial support for the institutions training health manpower. This support has been of three types: Assistance for the construction and renovation of facilities; student assistance through loans, scholarships, traineeships, and fellowships; and assistance for the operation, expansion, and improvement of the schools (including support of faculty).

In recent years, as the cost of medical education burgeoned and Federal contributions rose, there has been a growing concern over the impact of Federal aid on the institutions training health manpower, especially upon the supply, qualifications, and retention of faculty — its role models, recognition of its importance, etc. Under terms of a contract (No. MI-24401) with BHRD, the Association of American Medical Colleges (AAMC) agreed to carry out a series of studies of medical school faculty. These studies were in large part based on data in a Faculty Roster System maintained by the Association for all 114 medical schools in the United States.

A medical school faculty profile project was initiated in 1966 by the AAMC in cooperation with the National Institutes of Health. In the early years of the project's operation, faculty profile data were obtained by annual questionnaires sent to all medical schools. Under the contract with BHRD, a computerized Faculty Roster System was developed which provides for the immediate input of information by each medical school upon the accession of each new faculty member, each transfer or other departure, as well as each change in

status of a faculty member. The Faculty Roster System of the AAMC contains information on the demographic, educational, and professional characteristics of almost 50,000 past and present salaried faculty members.

This report "Mobility Characteristics of U.S. Medical School Faculty in 1971", is one of five reports covering various aspects of medical school faculty which have been prepared by the AAMC under its contract with BHRD. The study was designed to provide basic information on mobility and employment activities of faculty in a given year. It focuses on a broad description of the characteristics of faculty in the 113 medical schools in existence in 1971.

In this study, faculty members are divided into four groups on the basis of mobility status: 1) New hires, i.e., those who received their first appointment to a medical school in 1971 plus those who had been faculty members previously but not in 1970; 2) transfers, i.e., those who were employed at different medical schools in 1970 and 1971; 3) stayers, i.e., those who remained at the same medical school in 1970 and 1971; and 4) leavers, i.e., those who were employed in a medical school in 1970 but not in 1971.

Medical school faculty in the four mobility status groups are compared in terms of the following characteristics: Age, sex, country of training, support for pre and/or postdoctoral training, academic rank, nature of employment, department type, areas of responsibility, and geographic region of employment. Included also are two characteristics of the medical schools — ownership and age.

This report was prepared by Dr. Philip W. Anderson, Staff Associate, and Mr. Thomas A. Larson, Director, Faculty Profiles in the Division of Operational Studies,

* The Bureau of Health Resources Development (BHRD) became the Bureau of Health Manpower (BHM) on May 5, 1975.

Department of Planning and Policy Development at the Association of American Medical Colleges. The report is being published by the Resource Analysis Staff, Howard V. Stambler, Chief.

The five reports in the series are:

Mobility Characteristics of U.S. Medical School Faculty in 1971.

A Preliminary Analysis of Differen-

tial Characteristics Between High and Low Mobile Medical School Faculty.

– Institutional Variables Related to High Faculty Attrition.

– Medical School Characteristics Associated With Faculty Participation in Federal Programs.

– Postdoctorals vs. Nonpostdoctorals: Career Performance Differentials Within Academic Medicine.

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PURPOSE AND SCOPE

Descriptive and analytic studies of faculty have been conducted by many diverse institutions and organizations concerned with higher education. In 1969, the Bureau of Health Manpower Education, a component of the National Institutes of Health, requested the Association of American Medical Colleges to undertake an analysis of faculty manpower at academic health centers within the United States. Since that time, the Division of Operational Studies of the AAMC has held the responsibility for the collection and dissemination of data to describe and assess the "intellectual capital" of medical education, i.e. to study the sources of faculty and the circumstances of their training, the nature of the flow of persons from one institution to another, and the reasons for departure from medical academia.

The Faculty Profile staff of the Division of Operational Studies has recently completed studies relating to the mobility or movement of faculty into, within, and out of academic health centers.

This study, the first part of a series, was designed to provide basic information on the employment activities of medical school faculty in a given year. The study provides some direct answers to the question: "What do we know about medical school faculty movement into, within and out of academic medicine?"

The Faculty Roster Master File contains the core of AAMC data on medical school faculty. The instrument used to collect data for this file is the Salaried Medical Faculty Questionnaire. All persons in the file who were salaried faculty in either 1970 and/or 1971 were classified into four mutually exclusive employment mobility categories: (1) Newly Hired were faculty who were not at a medical school in 1970 but were salaried faculty in 1971; (2) Transferred were faculty who were employed at one medical school in 1970 and a different medical school in 1971; (3) Remained were faculty who maintained employment at the same medical school in 1970 and 1971. (4) Departed were faculty who were employed at a medical school in 1970 but did not return to any medical school in 1971. A total of 34,504 faculty members were classified into the above categories for this report.

HIGHLIGHTS

The major findings may be briefly summarized as follows:

- (1) New Hires accounted for 10 percent of the medical faculty force in 1971.
- (2) Most of the new hires were M.D.'s (60 percent), while new Ph.D.'s accounted for 25 percent of the total.

- (3) While new female faculty represented a fraction of the new hires (17 percent) greater than their total representation at medical schools' nationally (15 percent), they made up a smaller proportion of the new M.D.'s and Ph.D.'s.
- (4) Medical schools hired 7 out of every 10 new faculty as strict full-time employees.
- (5) Foreign graduates accounted for 18 percent of the new hires which was higher than the percentages of foreign graduates in the total faculty (15 percent).
- (6) New hires accounted for 11 percent of the faculty in clinical science departments in 1971 compared to 8 percent in the Basic Sciences and 9 percent in Pathology.
- (7) The faculty who transferred medical schools between 1970 and 1971 accounted for 1.9 percent of the total faculty in 1971.
- (8) Seventy-five percent of those who transferred had an M.D. degree.
- (9) For every 10 transfers, 9 of them were male faculty. Only 50 female faculty members transferred medical schools between 1970 and 1971.
- (10) The highest number of transfers within an academic rank was 239 at assistant professor.
- (11) The south retained the highest percentage of faculty who transferred medical schools (56 percent). The west was lowest with only 36 percent of its faculty transfers remaining within the region. Moreover, the south received the highest percentage of transfers from other regions.
- (12) A total of 2,350 persons terminated their faculty positions and failed to return to employment as a salaried faculty member in 1971.
- (13) Twenty-three percent of the departing M.D.'s left academic medicine for private practice. Ten percent of the departing Ph.D.'s transferred to faculty positions in academic institutions other than medical schools.
- (14) M.D.'s accounted for 63 percent of all faculty who left academic medicine.
- (15) The ranks of assistant professors and instructors when combined accounted for 65 percent of the departing faculty in 1971.

- (16) While foreign trained faculty represented 15 percent of the total faculty force in 1971, they represented 19 percent of those who left the preceding year.
- (17) Seventy-six percent of all faculty who left academic medicine were in clinical science departments, while only 69 percent of the 1971 total faculty were in clinical science departments.

INTRODUCTION

In recent years, health resource administrators and educators have been concerned with issues pertaining to faculty at medical schools within the United States. Heightened interest in monitoring faculty mobility has been generated from research concerning the extent of influence of faculty on students.

One may assume that a medical school, and its faculty, create an environment or model in which students are expected to acquire not only the necessary knowledge and skills, but also a set of appropriate professional attitudes and values. Since a large proportion of faculty members at medical schools are drawn from the profession toward which the students aspire, one may assume that faculty members play an extremely important role in molding the values and career decisions of their students. Coker et.al. (1960) found a relationship between the specialty of a named influential faculty member and the students' subsequent choice of specialty. Similar conclusions have been made by Kendall and Hanan (1957), and Christie and Merton, (1958). Young (1973) stated that the influence of faculty members may play a greater role in the student's career decision in specialities which are little known, than in those that "sell themselves" because of prestige and reputation.

Other studies have examined faculty influences on student selection of hospitals for internship and residency. Lyden and his colleagues (1968) found that full-time clinical faculty members frequently encouraged the "best" students to enter the faculty member's field and university hospital. Pavia et.al. (1964) reported that, overall, medical school faculty other than formal advisors are mentioned most often by medical students in influencing their choice of hospital for internship.

Schofield (1958) states that every teacher "owes it to his profession in general and to his own field in particular to make of himself a willing and accessible example - a flesh-and-blood object lesson from which the curious and undecided student may learn directly something of the frustrations and satisfactions, the challenges and sacrifices to be found in his chosen field."

Exposure to the "frustration and satisfactions" of faculty members serves as a learning experience not only for the student, but to the medical school administrator as well. Unfortunately, the dearth of literature on employment descriptors of medical school faculty, suggests that little is known or at least communicated about the roles of the faculty. While medical school administrators have available to them a wide range of information on student descriptors and student flow models, what information do they have available on faculty flow models?

Evolving developments in national legislation and medical school management have fostered the need for reliable information with regard to faculty mobility patterns.

Recent legislative action on the national scene may have a significant impact on the mobility patterns and characteristics of medical school faculty. For example, civil rights legislation has defined equal opportunity procedures for faculty hiring and promotion. Medical school administrators must become aware of the patterns of faculty movement into, within and out of their respective academic health centers.

Other legislative action has resulted in significant reduction in governmental support of pre- and post-doctoral training in research. What impact does this have on the research capabilities of faculty at U.S. medical schools?

The heightened interest in increasing numbers of physicians in the so-called "primary care" specialties may result in the development of new departments and faculty within medical schools in the next few years. What will be the characteristics of these new faculty members? and; What effects will these new departments have on overall departmental balance and structure?

Inadequate planning and uninformed decision-making have more serious consequences for the viability of the academic health center now than in the simpler situations which may have existed in the recent past. Today, plans involving faculty recruitment, development, and retention must be more sophisticated and reliable since decisions involve commitments of substantial resources, competitively sought. A detailed knowledge of faculty characteristics may allow medical school management to understand more closely its resources of new faculty, or intellectual capital for implementation of program planning and decision making in the areas of teaching, research, patient care and administration.

The Association of American Medical Colleges is cognizant of the important issues surrounding faculty movement within academic medicine. The Association is attempting to resolve the salient questions on faculty mobility and its importance in medical school management. Any attempt to assess predict or affect faculty movement into and out of medical schools requires a comprehensive view of faculty mobility within the entire realm of academic medicine.

Even though each medical school has its own unique qualities that distinguish it from another, differences can be examined in terms of faculty and school characteristics. Two general questions are pursued in the present report:

1. What are the mobility patterns of medical school faculty members as revealed through an analysis of faculty characteristics?

2. What are the mobility patterns of medical school faculty members as revealed through an analysis of institutional characteristics?

The Data Base

The core of the AAMC data system on faculty mobility is the Faculty Roster Master File. This file, maintained since 1967, includes information on close to 50,000 faculty members who are holding or have held salaried academic appointments at AMA/AAMC recognized medical schools within the United States. These faculty members are distributed among 113 medical schools within the United States.

The instrument used in data collection for the present study is the Salaried Medical Faculty Questionnaire. This questionnaire is essentially biographical in nature, consisting of 298 data elements. A copy of this instrument is included in Appendix A.

Each faculty member is asked to fill out a questionnaire at the time of his/her initial appointment. The questionnaire is subsequently remitted to the AAMC for processing.

The number of respondents in the AAMC Faculty Roster Master File is considered to approximate the population of medical school salaried faculty. Estimates from the Liaison Committee on Medical Education (LCME)¹ and AAMC Faculty Roster² for the total full and parttime faculty in FY 1970 and 1971 are different by only 4 to 6 percent.

Survey Procedures

In order to answer national questions concerning the movement or mobility of medical school faculty into, within, and out of U.S. academic medicine, it was necessary to create mobility categories for all faculty in a given year.

The first task was to select faculty from the Faculty Roster Master File and classify them into four mobility categories³ for a given calendar year. It was necessary to obtain employment location data for two years on each faculty member to determine the mobility status in one year. For example, the process in determining whether a faculty member in 1971 was a new hire, a transfer, a stayer or a leaver requires information on his/her employment location or activity in 1970. 34,504³ * faculty members in 1970 and 1971 have been classified into the above mobility categories for this report.

The use of calendar years rather than fiscal years was necessitated through limitations in the questionnaire. Faculty respondents were asked to record only calendar year dates without including months on employment questions. (See Appendix A).

Tabular Arrangements

The Tables in Appendix B of this report present a more detailed summary concerning the mobility activities of U.S. medical school Faculty than is contained in the narrative portion of this report. Some of these tables will be cited in the discussion.

AAMC Faculty Mobility Series: Report 1
Mobility Characteristics of Faculty at U.S. medical schools:
Calendar 1971

OVERVIEW

In calendar 1971, there were an estimated 32,154* salaried faculty members on staff at 113 medical schools within the United States.

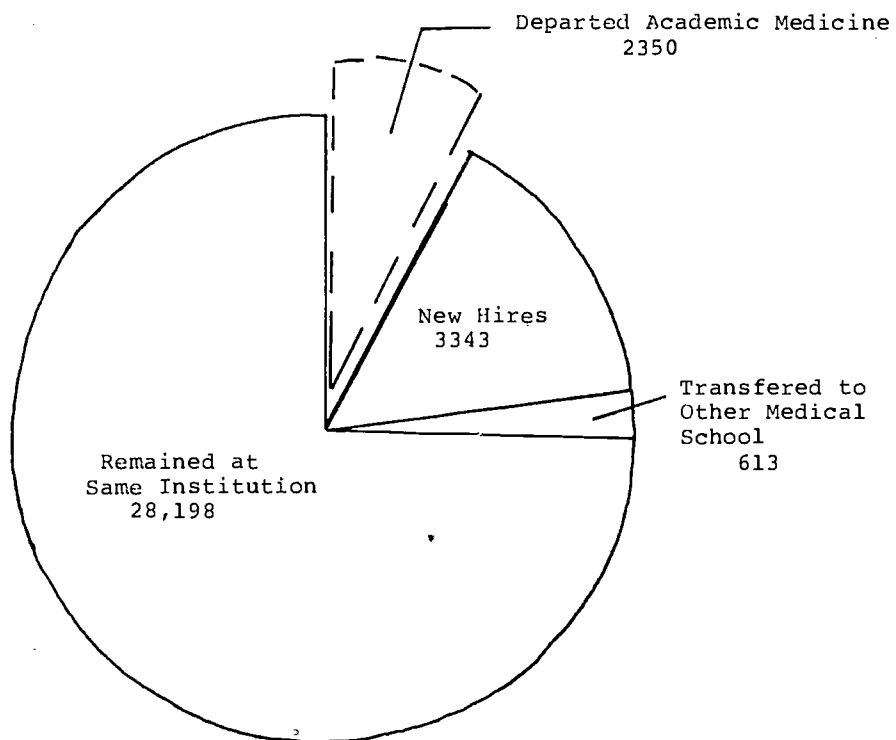
When looking at the total faculty manpower employment-mobility characteristics for this year, one can note in Figure 1 that 3,343 faculty were new hires⁵ (10 percent of total faculty); 613 transferred from other medical schools (1.9 percent of total faculty); and, 28,198 remained on staff at the same school (88 percent of total faculty).

In addition 2,350 faculty terminated employment in calendar 1970 and did not return to a medical school as a salaried faculty member in 1971. Subtracting this figure from the total new hires, we find an increase of at least 993 * 5 faculty members to the total faculty at academic health centers in 1971. The ratio is roughly three new faculty members for every two leavers.

These figures can be compared to earlier mobility studies. Dunham, Wright and Chandler (1964) reported estimates from the U.S. Office of Education which indicated that seventy-eight percent of the total teaching faculty at universities were employed at the same institution for both the 1961-62 and 1962-63 years. Eleven percent of the faculty changed institutions during this period, and 10 percent were new in higher education in 1962-63. The percentage of those who were new hires is quite similar to that reported in the present study. The most striking difference, however, is in the percentage of transfers and stayers. It should be noted that the total number of transfers reported in Figure 1 represents only medical school transfers. Figure 2 indicates that a high proportion of the new hires were professionally employed at other, non-medical, educational institutions, and could be considered as transfers under a different definition. Nonetheless, the combined percentage of new hires and transfers accounts for 12 percent of the faculty total in Calendar 1971. A more recent study by Brown (1967) indicated that each year between 15 and 20 percent of a typical institution's faculty is new, a higher estimate than the findings in the present report for medical schools.. This estimate is apparently due to the high percentage of the faculty who choose to remain.

Nearly one half of the new M.D. faculty (45 percent) came from an internship or residency. The next most frequent source of M.D.'s was an NIH training program (12 percent). Eleven percent of the newly hired M.D. faculty

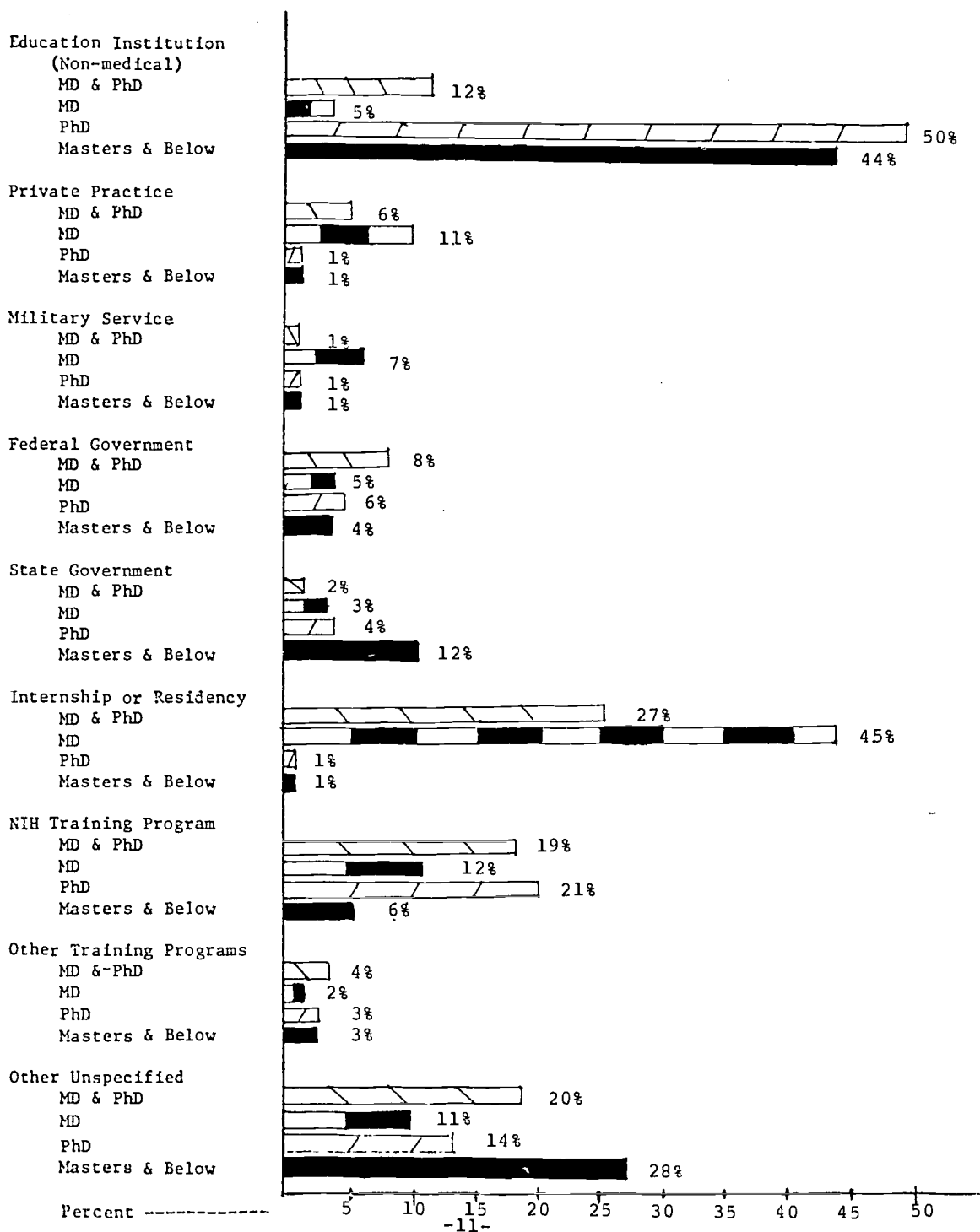
FIGURE 1
MOBILITY CHARACTERISTICS OF SALARIED FACULTY AT
U.S. MEDICAL SCHOOLS
IN 1971



Calendar 1971 = 32,154

FIGURE 2

Last Activity of Newly Hired
Medical School Faculty
(Calendar 1971)



were involved in private practice immediately preceding their appointment to a faculty position.

One out of every two newly hired Ph.D. faculty came from employment in other institutions of higher education (non-medical). An additional 21 percent came from an NIH training program. That many newly hired faculty have come directly from specialized training (e.g., internships, fellowships) or continuing education programs is confirmed by their employment history. Figure 3 indicates that this was the first professional employment for 46 percent of the new hires. It is also interesting to note that 51 percent of the total faculty have had only their current job.

The reasons why eighty-eight percent of the medical school faculty remained at the same institution for 1970 and 1971 or why close to 3000 changed their status, transferred institutions or left academic medicine are not completely known. Figure 4 indicates some of the employment plans and separation reasons reported for deactivated medical school faculty. Twenty-three percent of the departing M.D.'s left academic medicine for private practice. Eighteen percent of the departing M.D. faculty left their salaried positions at medical schools, but remained in a volunteer or non-salaried capacity. Seventeen percent of those with an M.D.-Ph.D. were relocated to a foreign country. Many faculty who left academic medicine were indicated as "resigned other reasons" (21 percent of total faculty) or "unknown" (22 percent of total faculty). Of those with a Master's degree and below, 40 percent were shown as resigned other reasons, and the separation reason for 34 percent of all faculty was unknown. It should be noted that the separation reason is reported by the school, in many cases without consultation with the departing individual.

Caplow and Magee noted that prior to 1964 the normal attrition rate for positions in college teaching from death, disability, retirement, and quitting to enter another field has been about 6 percent, a percentage quite comparable to medical school faculty estimates in calendar 1971.

FIGURE 3

Total Number of Jobs of
Medical School Faculty
By Mobility Status

Percent Involvement

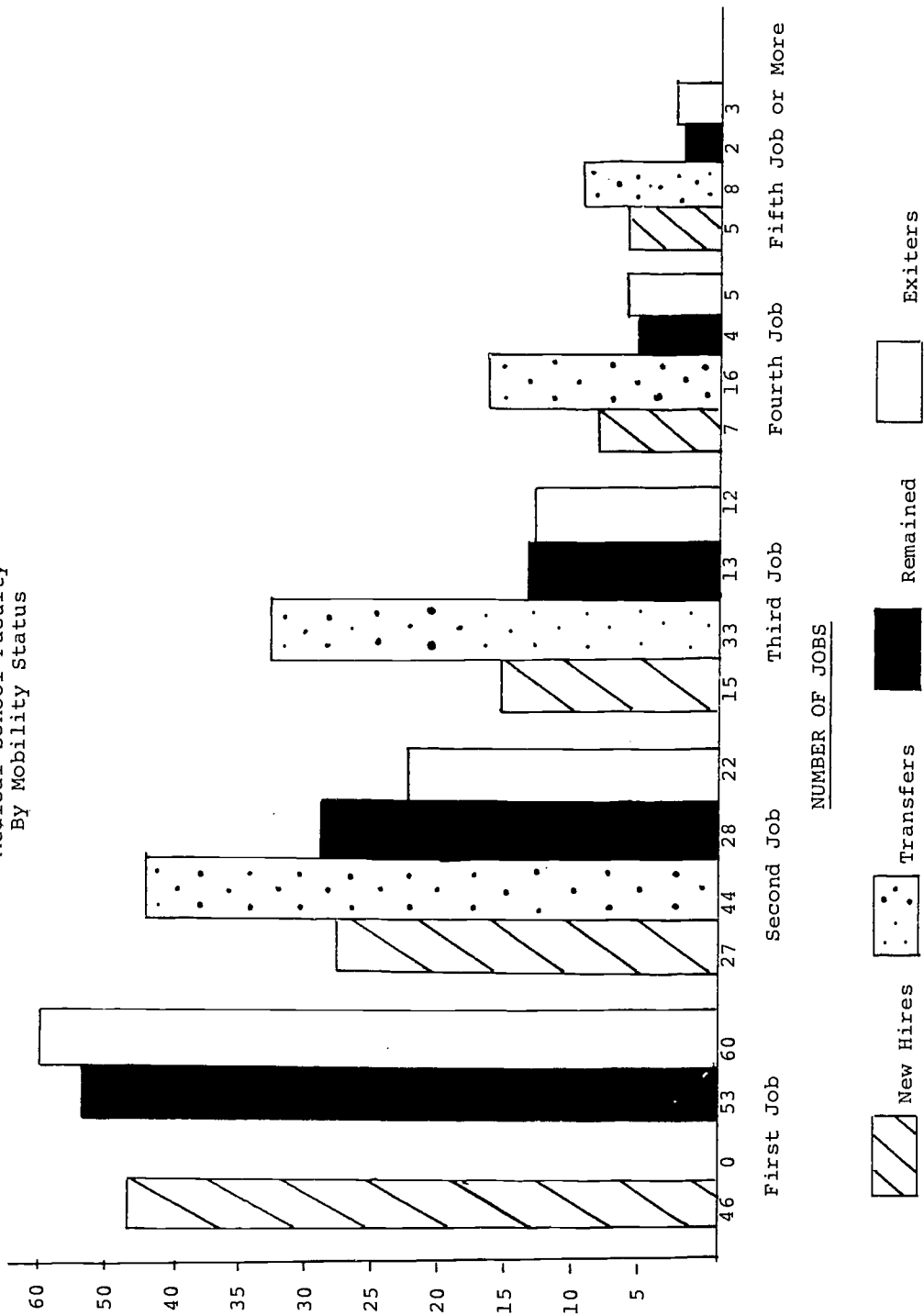


FIGURE 4

Employment Plans and/or Separation
Reasons of Deactivated Medical School Faculty
(Calendar 1971)

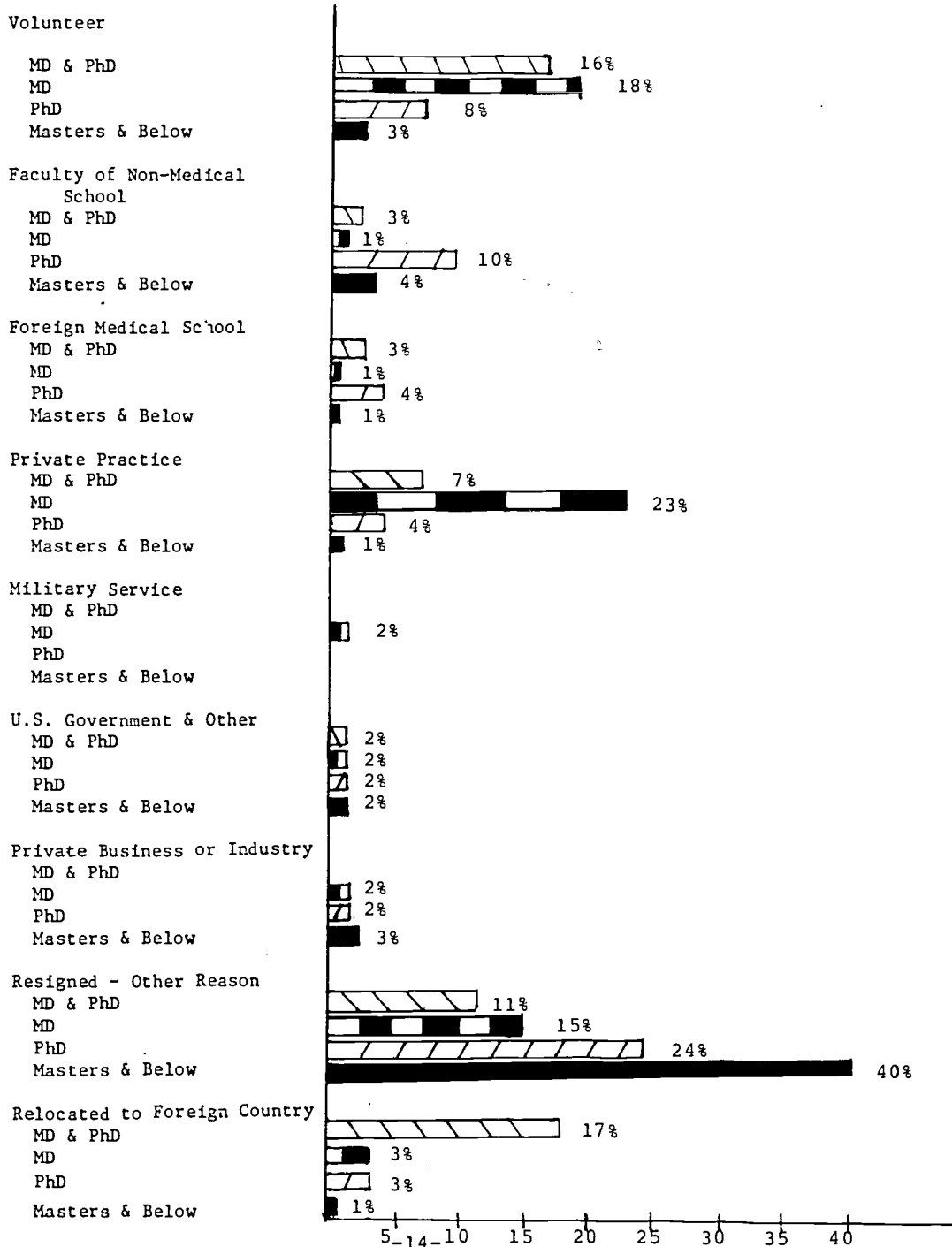
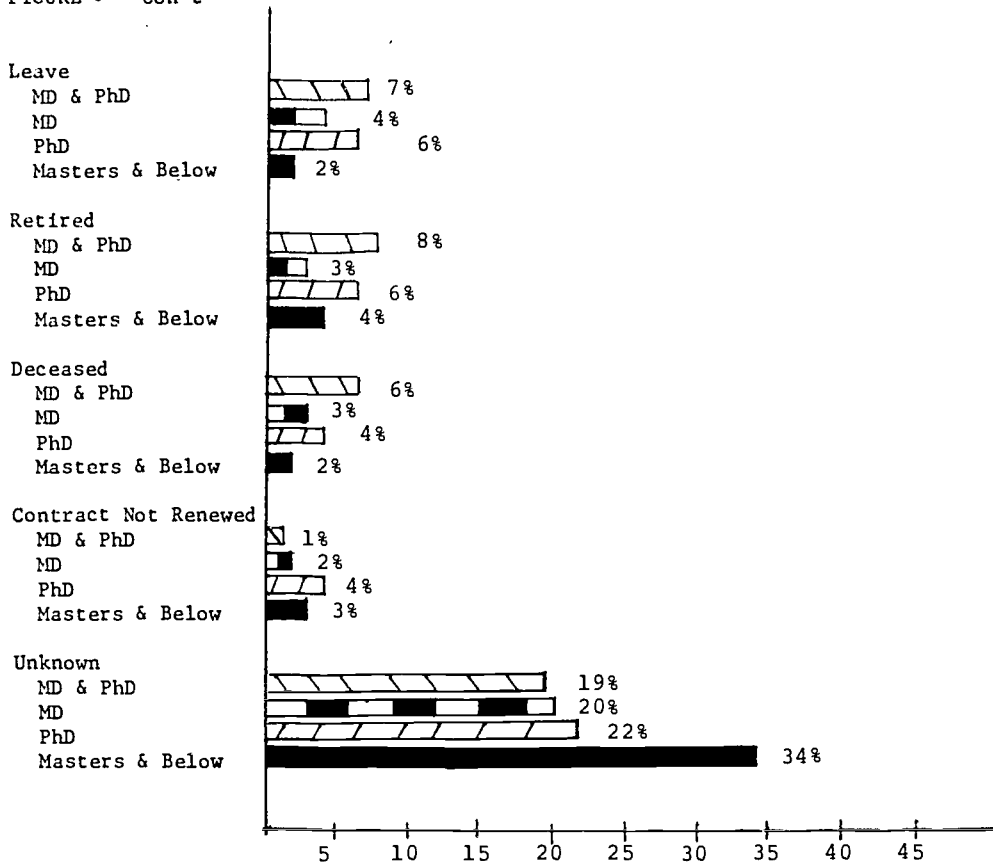


FIGURE 4 - Con't



FACULTY CHARACTERISTICS

Degree

When looking at faculty by their highest professional degree one can note in Table 1, that M.D.'s combined with M.D.-Ph.D.'s accounted for 2,145 or 65 percent of the total faculty accessions in 1971. Eight hundred twelve faculty holders of third-level degrees (Ph.D., Sc.D., or Ed.D., but not M.D.) hereinafter abbreviated as Ph.D.'s, were newly hired and accounted for an additional 24 percent of the accessions. There were 386 new faculty members with a Master's degree or less, a number accounting for the final 12 percent of faculty accessions.

Roughly seventy-five percent of the medical school transfers between 1970 and 1971 were M.D.'s, or M.D.-Ph.D.'s, numbering 458. Transfers by Ph.D.'s totaled 146 or 24 percent of the inter-medical school movement. There were only 9 faculty members with the Master's degree or less who transferred from one medical school to another between these two years. Within each degree category, those with the M.D. plus Ph.D. were the most stable; for this group 93 percent of the total faculty in calendar 1970 remained at the same institution in 1971. The stability for all other degree types was about the same, with 67 percent remaining at the same school. Table I indicates that new hires in 1971 accounted for 11 percent of the total M.D. faculty, 13 percent of the faculty with Master's degrees, 14 percent of faculty with only the Bachelor's degree, and 10 percent of faculty with the Ph.D. degree. M.D.-Ph.D. new hires only accounted for 5 percent of total faculty with the combined degree in calendar 1971. Estimates on degree levels of faculties at universities from the American Council on Education indicate that, in 1969, 45 percent of the faculty had a Ph.D. or its equivalent; 5 percent had a medical degree; 35 percent had a Master's degree; 9 percent had a professional degree, while 7 percent of faculty had a Bachelor's degree or less. It should be noted in Table I that 92 percent of the total medical school faculty had at least an M.D. or Ph.D., almost twice the proportion of those with doctoral degrees in regular universities.

When looking at faculty attrition, 1,473 M.D.'s did not return to the medical school universe in 1971, which accounted for 63 percent of all faculty who left. Four hundred forty-seven Ph.D.'s did not return (19 percent of the leavers) and 312 faculty with the Master's or less failed to return for the 1971 calendar year (14 percent of the leavers).

TABLE 1

Degrees of Medical School Faculty
By Mobility Status
(Calendar 1971)¹

Degree	Faculty in 1971								Departed #
	Total		New Hires		Transfers		Remained		
	#	%	#	%	#	%	#	%	
MD&PhD	1779	100	84	5	43	2	1652	93	118
MD Only	19172	100	2061	11	415	2	16696	87	1473
PhD Only	8296	100	812	10	146	2	7338	87	447
Master's	2000	100	263	13	7	() ³	1730	87	183
Bachelor's or Assoc.	692	100	96	14	1	() ³	595	86	84
None	215	100	27	13	1	() ³	187	87	45
Total	32154		3343		613		28198		2350
Percent Distribution by Degree ²									
	<u>100</u> ²		<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>
MD & PhD	6		3		7		6		5
MD Only	60		62		68		60		63
PhD Only	26		24		24		26		19
Master's	6		8		1		6		8
Bachelor's or Assoc.	2		3		() ³		2		4
None	1		1		() ³		1		2

(1) Does not include departed faculty - (1970 Faculty who did not return to academic medicine in 1971)

(2) Percents may not add up to 100% due to rounding

(3) Less than 0.5 percent

Age

Faculty age is a useful characteristic when observing the "flow" of faculty into, within, and out of the medical school system. When looking at the age of medical school faculty in 1971, it was found that almost three out of every five faculty were between the ages of 35 and 49 (Figure 5). One out of every four faculty were over age 50, and one out of five faculty were 34 years of age or less. Sixty-four percent of the new hires are between the ages of 30 and 39 with a mean age of 36. The transfers were slightly older than the new hires, having a mean age of 41 (Figure 5). It appears that most of the transfers had moved fairly early in their careers in that only 11 percent of the faculty who transferred were over 50 years of age. Most of those who departed academic medicine were also in mid-career, having a mean age as a group of 42.

Estimates on age levels of faculty at four year colleges and universities from the American Council on Education revealed that in 1969, 33 percent of college faculty were 35 years of age or less, 44 percent were between 36 and 50, 24 percent of the faculty were over 51 years of age. Hence, it would appear that on the average, faculty at medical schools are older than those at other institutions of higher education.

Sex

In calendar 1971 there were an estimated total of 27,411 male faculty (85 percent) and 4,679 female faculty (15 percent) at U.S. medical schools. The male new hires accounted for 10 percent of the total male faculty in calendar 1971, while female new hires accounted for 12 percent of the total female faculty (Table 2). Detailed information on sex characteristics of newly hired faculty is provided in Table 2, Appendix B. It should be noted that only 5 percent of the male new hires had a Master's degree or less, whereas 41 percent of the female new hires had a Master's degree or less. When looking at transfers in Table 2, only 50 female faculty members transferred from one medical school to another between 1970 and 1971, i.e. for every 10 transfers in 1971, 9 of them were male. From 1970 to 1971, 1,939 male faculty, (83 percent of the total faculty) did not return to academic medicine. Three-hundred ninety-two women faculty left academic medicine in the same year. In proportion to the numbers of total faculty in 1971, the 1970 attrition was slightly higher for women than for men.

FIGURE 5

MEDICAL SCHOOL FACULTY BY AGE
ACCORDING TO MOBILITY STATUS

Percent of Each
Age Group

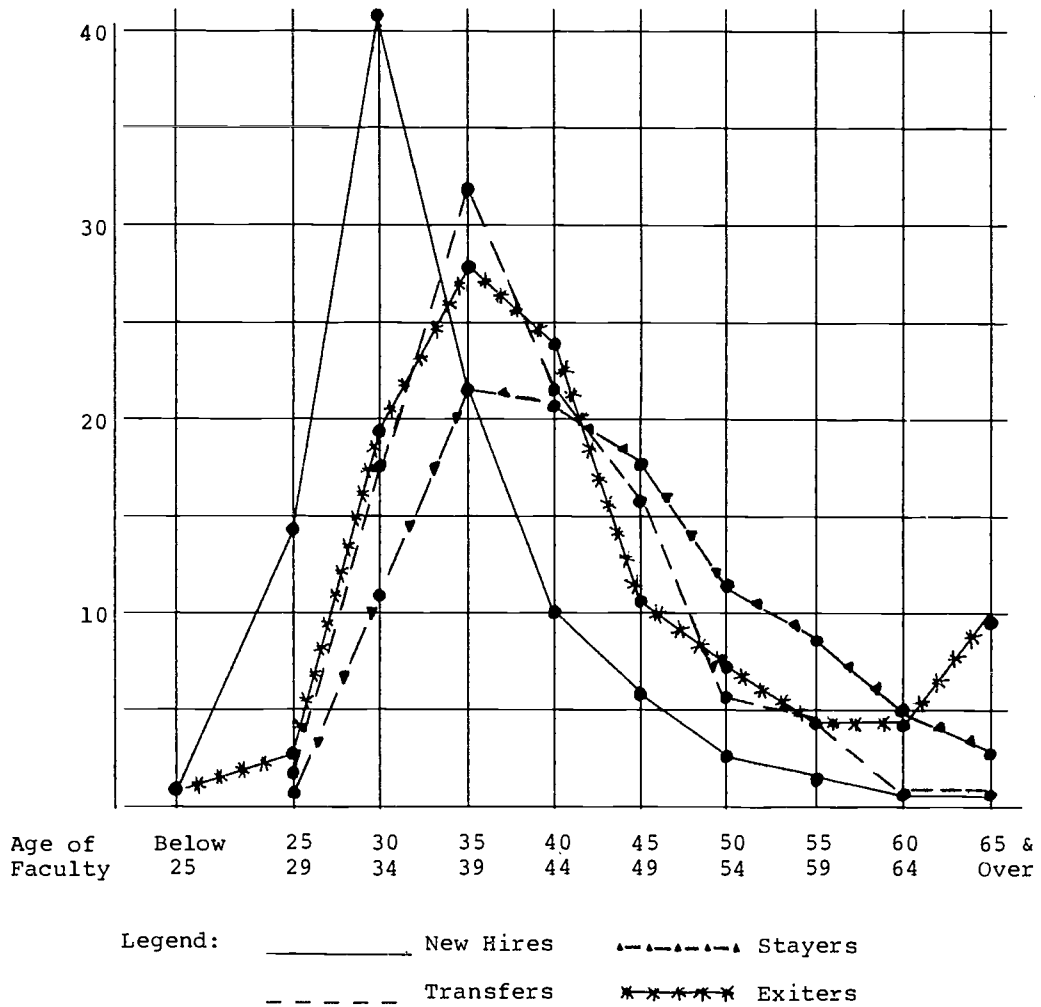


TABLE 2

Sex of Medical School Faculty
By Mobility Status
(Calendar 1971)

Sex	Total		New Hires		Transfers		Remained		Departed
	#	%	#	%	#	%	#	%	#
MALE	27411	100	2761	10	562	2	24088	88	1939
FEMALE	4679	100	567	12	50	1	4062	87	392
Total	32090	²	3288		612		28150		2331

Percent Distribution by Sex

	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
MALE	85	83	92	86	83
FEMALE	15	17	8	14	17

(1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).

(2) Excludes 64 faculty whose sex was not reported

Academic Rank

Overall, the academic rank most frequently held at U.S. medical schools is Assistant Professor (34 percent), but there is also a substantial percentage of Full Professors (25 percent) and Associate Professors (23 percent) followed by Instructors (13 percent) and Lecturers (4 percent).

Estimates from the American Council on Education indicate that in 1969, 27 percent of the faculty at universities and four year colleges were at the rank of Full Professor, 21 percent of the faculty were at the rank of Associate Professors, 28 percent of the faculty were Assistant Professors and 20 percent had the rank of Instructor. The combined percentages of faculty in the upper two ranks are quite similar between medical schools and non-medical schools; however, medical schools appear to have a much higher percentage of Assistant Professors.

When looking at the mobility category of individuals by their faculty rank, one can observe in Table 3 that the highest number of new hires in calendar 1971 were assistant professors, whose 1,359 accessions accounted for 41 percent of the new hires in that year. 1,310 persons were hired at the instructor level and accounted for an additional 40 percent of the new faculty hires in Calendar 1971. Hence, for every 10 new hires in calendar 1971, 8 were either assistant professors or instructors in what are usually considered non-tenured positions. The highest number of transfers was 242 at the Assistant Professor level. The lowest number of transfers was 9 at the lecturer level. The highest number of leavers between these two years was at the rank of Assistant Professor with 783 leaving academic medicine. Instructors were the next highest in attrition losing 707. These ranks combined account for 65 percent of the departed faculty between 1970 and 1971. Positions that are usually tenured, such as Associate and Full Professors, accounted for only 27 percent of all those who left academic medicine.

TABLE 3

Academic Rank of Medical School
Faculty By Mobility Status
(Calendar 1971)

Academic Rank	Faculty in 1971 ¹								Departed #
	Total		New Hires		Transfers		Remained		
	#	%	#	%	#	%	#	%	
Professor	7930	100	143	2	185	2	7602	96	293
Assoc. Prof.	7459	100	222	3	143	2	7094	95	322
Asst. Prof.	10957	100	1359	12	242	2	9356	85	783
Instructor	4219	100	1310	31	29	2	2880	69	707
Lecturer	1209	100	255	21	9	1	945	78	18 ²
	31774 ²		3289		608		27877		2287
	Percent Distribution by Academic Rank ³								
		<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>	<u>100</u>
Professor		25		4		30		27	13
Assoc. Prof.		23		7		24		25	14
Asst. Prof.		34		41		40		34	34
Instructor		13		40		5		11	31
Lecturer		4		8		2		4	8

(1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971)

(2) Excludes 380 faculty whose academic rank was not reported

(3) Percents may not add up to 100% due to rounding.

Nature of Employment

The employment categories of faculty reported in this section are defined as follows: Strict full-time faculty receive their entire medical school income as a fixed annual amount from funds controlled by the medical school or its parent institution; Geographic full-time faculty receive a guaranteed base salary (all or most of which is paid from funds controlled by the medical school, but income may be earned from professional activities) and conduct all of their professional work in the institution(s) paying the base salary; Part-time salaried faculty receive regular payments for part-time professional activity from funds controlled by the medical schools.

In calendar 1971, there were 22,438 or 71 percent of the faculty employed as strict full-time, 5,670 or 18 percent as geographic full-time and 3,658 or 12 percent as part-time salaried (Table 4). New hires accounted for 10 percent of the part-time salaried positions in calendar 1971, while in geographic and strict full-time employment categories, they accounted for 9 percent and 11 percent respectively. Table 4 in Appendix B indicates that 20 percent of the M.D.'s who left academic medicine were in geographic full-time positions compared to 12 percent of the Ph.D.'s who left.

Transfers accounted for 2.0 percent of strict and 1.8 percent of geographic full-time positions and only 1.1 percent of part-time salaried positions in 1971.

The transfers did not account for more than 2 percent of calendar 1971 total faculty within any of the employment categories. It should be noted, however, that the percentage of strict full-time faculty among new hires and transfers was greater than the percentage of strict full-time faculty in the total faculty count for 1971. This suggests the possibility of a trend towards faculty being strict full-time.

The percentage of part-time salaried faculty who left academic medicine was greater than the total percentage of part-time salaried faculty in 1971.

In summary, it would appear that the proportion of strict full-time positions is increasing and that the proportion of part-time salaried positions is decreasing.

TABLE 4

Nature of Employment of Medical School
Faculty By Mobility Status
(Calendar 1971)

Employment	Faculty in 1971 ¹								Departed #
	Total		New Hires		Transfers		Remained		
	#	%	#	%	#	%	#	%	
Strict-Full Time	22438	100	2410	11	457	2	19571	87	1290
Geographic Full Time	5670	100	503	9	103	1.8	5064	89	320
Part Time-Salaried	3658	100	376	10	39	1.1	3243	89	316
Total	31766 ²		3289		599		27878		1926
Percentage Distribution by Nature of Employment ³									
	<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>
Strict Full-Time	71		73		76		70		67
Geographic Full-Time	18		15		17		18		17
Part-Time Salaried	12		11		7		12		16

- (1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).
- (2) Excludes 388 faculty whose nature of employment was not reported.
- (3) Percents may not add up to 100% due to rounding.

Number and Areas of Responsibility

The areas of responsibility refer to the major functional responsibilities of the faculty member, such as teaching, research, patient service, administration, other, or a combination of these areas.

The histogram in Figure 6 indicates the number of activities in which all faculty members are involved within each mobility category.

Tables 5A, 5B and 5C show the distribution of responsibilities for M.D.'s, Ph.D.'s and non-doctoral faculty, respectively.

In calendar 1971, 38 percent or the plurality of M.D.'s were involved in three major functional responsibilities followed by 30 percent of the M.D.'s who were involved in two major activities. Another 19 percent of the M.D.'s had been doing four areas of responsibilities. The most common combination of activities among the total M.D. faculty force was teaching, research and patient service. These three activities were also most prevalent for M.D.'s who were new hires, transfers and those who remained at the same institution. However, most of the M.D.'s who departed academic medicine were involved in only two areas of responsibility, teaching and research.

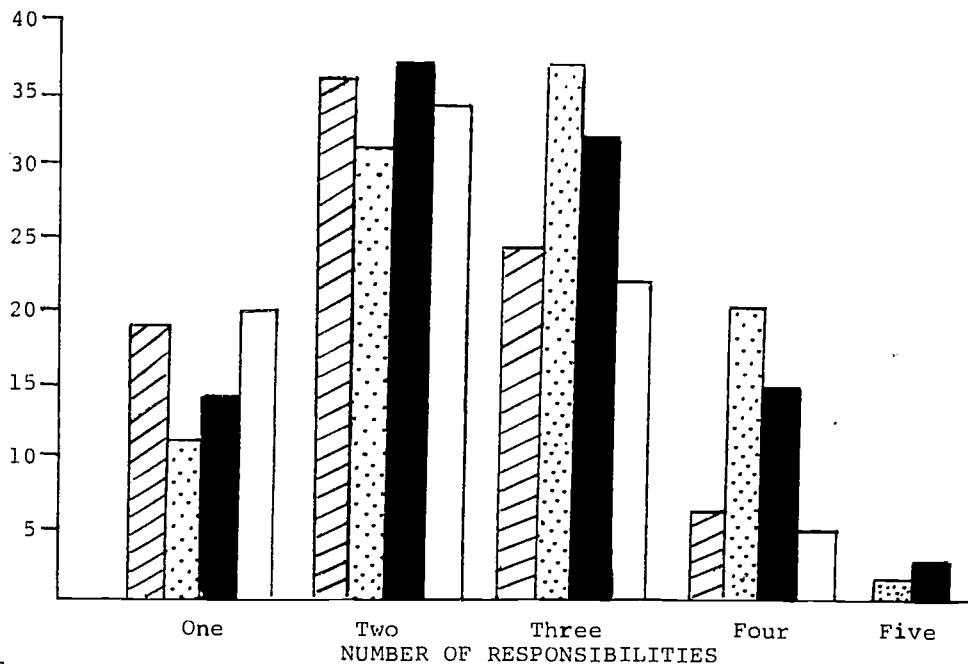
The plurality of Ph.D.'s (58 percent) were involved in two major responsibilities at the medical school in Calendar 1971. The most frequent combination of responsibilities in each mobility category for Ph.D. faculty was teaching and research.

Most of the faculty without doctoral degrees were involved in only one area of responsibility (39 percent). The most frequent responsibility found among the total non-doctoral faculty was teaching. However, the modal combination of responsibilities for non-doctoral faculty in each mobility category was teaching and patient service.





Country of Training

One topic of interest concerns the country in which the faculty member received his or her professional preparation for academic medicine. For the present purpose, countries of training are classified into three categories; U.S., Canadian and Foreign (non-Canadian). Table 6 indicates that for U.S. medical schools, 84 percent of the total faculty at academic health centers in calendar 1971 had received their formal professional training in the U.S. Canadian trained faculty account for another two percent, while foreign trained faculty account for 14 percent of the total faculty. Foreign trained new hires accounted for 13 percent of the total foreign trained faculty estimates in

FIGURE 6
 Number of Responsibilities of
 Medical School Faculty
 By Mobility Status



Legend:

-  New Hires
-  Transfers
-  Remained
-  Exiters

TAB II. 5A

Area of Responsibility of
MD Faculty By Mobility Status¹

(Calendar, 1971)

FACULTY RESPONSIBILITY	Faculty In 1971 ²					Departed #
	Total MD #	New Hires #	Transfers #	Remained #		
ONE AREA OF RESPONSIBILITY						
Teaching	1495	199	24	1272		131
Research	419	51	7	361		37
Service	363	74	5	284		48
Administration	218	10	5	203		18
Other	57	6	0	51		2
Totals	2552	340	41	2171		236
TWO AREAS OF RESPONSIBILITY						
Teaching and research	2055	142	39	1874		144
Teaching and service	3259	527	46	2886		317
Teaching and administration	485	32	7	446		29
Teaching and other	172	10	1	61		2
Research and service	126	20	3	103		16
Research and administration	46	1	1	44		2
Research and other	11	1	0	10		1
Service and administration	92	8	1	83		8
Service and other	18	11	0	7		3
Administration and other	4	2	0	2		0
Totals	6168	754	98	5316		518
THREE AREAS OF RESPONSIBILITY						
Teaching, research and service	5234	593	133	4508		292
Teaching, research and administration	877	32	24	821		22
Teaching, research and other	98	6	0	92		2
Research, service and administration	25	1	1	23		0
Research, service and other	4	0	0	4		1
Service, teaching and administration	1447	121	31	1295		80
Service, teaching and other	168	86	0	82		8
Service, administration and other	4	1	0	3		1
Administration, teaching and other	24	0	0	24		0
Administration, research and other	1	0	0	1		0
Totals	7882	840	189	6853		406
FOUR AREAS OF RESPONSIBILITY						
Teaching, research, service and administration	3762	155	112	3495		106
Teaching, research, service and other	81	14	0	67		2
Research, service, administration, and other	0	0	0	0		0
Service, teaching, administration, and other	30	3	0	27		1
Administration, teaching, research, and other	25	1	0	24		0
Totals	3898	173	112	3613		109
FIVE AREAS OF RESPONSIBILITY						
Teaching, research, service, administration and other	144	4	5	135		5

(1) Includes MD-PhD's

(2) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971)

TABLE 5B

Areas of Responsibility of
Ph.D. Faculty By Mobility Status
(Calendar, 1971)

FACULTY RESPONSIBILITY	Faculty in 1971 ¹				
	Total Ph.D. #	New Hires #	Transfers #	Remained #	Departed #
ONE AREA OF RESPONSIBILITY					
Teaching	314	55	8	251	38
Research	786	137	10	639	83
Service	55	18	2	35	3
Administration	60	5	3	52	5
Other	8	0	0	8	2
Totals	1,223	215	23	985	131
TWO AREAS OF RESPONSIBILITY					
Teaching and research	4263	383	80	3800	136
Teaching and service	229	42	3	184	20
Teaching and administration	114	7	2	105	4
Teaching and other	12	1	1	10	1
Research and service	69	10	0	59	8
Research and administration	65	7	0	58	1
Research and other	8	0	0	8	0
Service and administration	25	1	0	24	5
Service and other	1	0	0	1	0
Administration and other	2	1	0	1	0
Totals	4,788	452	86	4,250	175
THREE AREAS OF RESPONSIBILITY					
Teaching, research and service	684	64	7	613	30
Teaching, research and administration	877	30	22	825	16
Teaching, research and other	52	2	2	48	2
Research, service and administration	26	4	0	22	2
Research, service and other	1	0	0	1	0
Service, teaching and administration	108	14	0	94	4
Service, teaching and other	3	0	0	3	0
Service, administration and other	0	0	0	0	0
Administration, teaching and other	5	0	0	5	0
Administration, research and other	0	0	0	0	0
Totals	1,756	114	31	1,611	54
FOUR AREAS OF RESPONSIBILITY					
Teaching, research, service and administration	393	24	4	365	10
Teaching, research, service and other	11	1	0	10	1
Research, service, administration and other	0	0	0	0	0
Service, teaching, administration and other	0	0	0	0	0
Administration, teaching, research and other	10	1	0	9	0
Totals	414	26	4	384	11
FIVE AREAS OF RESPONSIBILITY					
Teaching, research, service, administration and other	29	1	1	27	0

(1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).

TABLE 5C

Areas of Responsibility of Non-Doctoral
Faculty By Mobility Status
(Calendar, 1971)

FACULTY RESPONSIBILITY	Faculty In 1971 ¹				
	Total Non-doctoral	New Hires	Transfers	Remained	Departed
ONE AREA OF RESPONSIBILITY					
Teaching	377	42	2	333	39
Research	251	34	0	217	21
Service	264	66	0	198	28
Administration	190	21	0	169	13
Other	39	3	0	36	5
Totals	<u>1121</u>	<u>166</u>	<u>2</u>	<u>953</u>	<u>106</u>
TWO AREAS OF RESPONSIBILITY					
Teaching and research	205	29	2	174	18
Teaching and service	486	77	0	409	45
Teaching and administration	173	26	1	146	20
Teaching and other	22	2	0	20	2
Research and service	48	3	0	45	9
Research and administration	17	2	0	15	0
Research and other	2	0	0	2	0
Service and administration	73	11	1	61	5
Service and other	14	1	0	13	0
Administration and other	13	1	0	12	1
Totals	<u>1053</u>	<u>152</u>	<u>4</u>	<u>897</u>	<u>130</u>
THREE AREAS OF RESPONSIBILITY					
Teaching, research, and service	224	23	1	200	18
Teaching, research and administration	54	4	0	50	5
Teaching, research and other	14	2	0	12	1
Research, service and administration	12	1	1	10	2
Research, service and other	2	0	0	2	1
Service, teaching, and administration	222	18	0	204	17
Service, teaching and other	11	1	0	10	0
Service, administration and other	11	3	0	8	0
Administration, teaching and other	9	0	0	9	0
Administration, research and other	1	0	0	1	0
Totals	<u>560</u>	<u>52</u>	<u>2</u>	<u>506</u>	<u>44</u>
FOUR AREAS OF RESPONSIBILITY					
Teaching, research, service and administration	97	5	0	92	8
Teaching, research, service and other	2	0	0	2	0
Research, service, administration and other	0	0	0	0	0
Service, teaching, administration and other	10	3	0	7	0
Administration, teaching, research and other	4	0	0	4	0
Totals	<u>113</u>	<u>8</u>	<u>0</u>	<u>105</u>	<u>8</u>
FIVE AREAS OF RESPONSIBILITY					
Teaching, research, service, administration and other	16	2	1	13	0

(1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971)

1971 while the U.S. and Canadian trained new hires accounted for 10 percent of their respective categories. Though foreign trained faculty accounted for 14 percent of the total faculty force in 1971, 19 percent of the faculty who left academic medicine in 1970 were foreign trained. Table 5 in Appendix B indicates that 90 percent of the newly hired foreign graduates had an M.D. or M.D.-Ph.D. degree, compared to 60 percent of the newly hired U.S. graduates.

Pre-Doctoral Support

Pre-doctoral support refers to support received while working toward a doctoral degree. As observed in Table 7, only 25 percent of the total faculty who responded to this question had received pre-doctoral support. Furthermore, only 21 percent of the new hires had pre-doctoral support, the lowest percentage of all mobility categories, while 26 percent of the transfers had pre-doctoral support. Table 6 in Appendix B indicates that 71 percent of the newly hired faculty who had pre-doctoral support were Ph.D.'s. In fact, over 60 percent of the newly hired Ph.D.'s had pre-doctoral support. The mobility category with the highest percentage of faculty with pre-doctoral support was found among those who left academic medicine (28 percent).

Post-Doctoral Support

Post doctoral support follows one or more doctoral degrees, and reflects training not directed toward obtaining a degree. Table 8 indicates that 47 percent of the total faculty have had post-doctoral support. New hires had the lowest percentage of faculty with postdoctoral support at 35 percent. Transfers, however, had more faculty with post-doctoral support (55 percent) than without such support. Faculty who left academic medicine had almost equivalent percentages with postdoctoral support (46 percent) as those in the total faculty in calendar 1971.

In contrast to those with pre-doctoral support, Table 7 in Appendix B indicates that 63 percent of the new hires with post-doctoral support were M.D.'s, rather than Ph.D.'s. One can also note that there were more Ph.D.'s without post-doctoral support (54 percent) than with support.

One must use caution in interpreting these figures when comparing new hires to the leavers since faculty leaving academic medicine are older, and thus have had more opportunity for such training.

TABLE 6

Country of Training of
Medical School Faculty
By Mobility Status
(Calendar 1971)

Country	Total ¹		New Hires		Transfer		Remained		Deported
	#	%	#	%	#	#	#	%	#
U.S.	26748	100	2659	10	490	2	23599	88	1790
Canadian	560	100	53	10	9	2	498	89	51
Foreign	4516	100	580	13	111	2	3825	85	432
<u>TOTAL</u>	31824 ²		3292		610		27922		2273
Percent distribution by Country of Training									
	<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>
U.S.	84		80		80		85		79
Canadian	1.2		1.6		1.5		1.8		2.2
Foreign	14		18		18		14		19

- (1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971)
- (2) Does not include 330 faculty whose country of training was not reported.
- (3) Percents may not add up to 100% due to rounding.

TABLE 7

Pre-Doctoral Support of
Medical School Faculty
By Mobility Status
(Calendar, 1971)

<u>Status</u>	Faculty in 1971 ¹									
	<u>Total</u> ¹		<u>New Hires</u>		<u>Transfers</u>		<u>Remained</u>		<u>Departed</u>	
	#	%	#	%	#	%	#	%	#	%
No Pre-Doctoral Support	21757	100	2538	12	422	2	18797	86	1008	
Pre-Doctoral Support	7155	100	675	9	148	2	6332	88	385	
<u>TOTAL</u>	28912 ²		3213		570		25129		1393	
Percent distribution by Pre-Doctoral Support										
	<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>	
No Pre-Doctoral Support	75		79		74		75		72	
Pre-Doctoral Support	25		21		26		25		28	

- (1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).
- (2) Does not include 3242 faculty whose response to this question was not reported.

TABLE 8

Post-Doctoral Support of
Medical School Faculty
(Calendar, 1971)

STATUS	Faculty in 1971 ¹									
	Total ¹		New Hires		Transfers		Remained		Departed	
	#	%	#	%	#	%	#	%	#	
No Post-Doctoral Support	16081	100	2116	13	262	2	13703	85	870	
Post-Doctoral Support	14239	100	1132	8	324	2	12783	90	748	
<u>TOTAL</u>	30320 ²		3248		586		26486		1618	
Percent distribution by Post-Doctoral Support										
No Post-Doctoral Support	$\frac{100}{53}$		$\frac{100}{65}$		$\frac{100}{45}$		$\frac{100}{52}$		$\frac{100}{54}$	
Post-Doctoral Support	47		35		55		48		46	

- (1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).
- (2) Does not include 1834 faculty whose response to this question was not reported.

INSTITUTIONAL CHARACTERISTICS

Ownership

Sixty-eight of the recognized medical schools within the United States are publicly owned while 45 are privately owned. In calendar 1971, the publicly owned schools hired 2,025 new faculty, which was an average of close to 30 new faculty members for each school. The privately owned schools hired 1,318 new faculty or a comparable average of 29 new faculty members to each school. New hires accounted for 12 percent of the faculty of publicly owned medical schools in calendar 1971 while new hires at privately owned schools accounted for 9 percent of their total faculty (Table 9).

The public schools hired 372 (61 percent) of those who transferred to other medical schools in 1971, compared to 241 (39 percent) for the private institutions. The number of faculty leaving academic medicine were quite similar for both types of ownership in calendar 1971. 1,160 faculty left academic medicine from public institutions while 1,190 faculty members left academic medicine from private institutions. Fifty-one percent of all those who left academic medicine were from the private institutions (26.4 faculty per school) even though private institutions accounted for only 46 percent of the total faculty in U. S. medical schools in 1971. The public schools lost 17 faculty per school.

Region⁶

When looking at absolute figures, the highest number of faculty are located in the Northeastern region of the United States where 11,882 faculty accounted for 37 percent of the total U. S. medical school faculty. The Midwest region was next with 8,272 (26 percent of U. S. medical school faculty). Faculty in the Southern region number 7,588 (24 percent of the total faculty) and in the Western region, 4,412 or 14 percent.

Table 10 indicates that in both the Midwest and Southern regions 12 percent of all faculty were new hires. The Western region was next, where 10 percent of the faculty in the region were new hires, while the Northeastern region closely followed with 9 percent of the faculty being new hires.

TABLE 9

Ownership of Medical School
By Mobility Status
(Calendar, 1971)

Ownership	Faculty in 1971 ¹								Departed #
	Total		New Hires		Transfers		Remained		
	#	%	#	%	#	%	#	%	
Public	17428	100	2025	12	372	2	15031	86	1160
Private	14726	100	1318	9	241	1	13167	89	1190
<u>TOTAL</u>	32154		3343		613		28198		2350
Percent distribution by Ownership									
	<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>
Public	54		61		61		53		49
Private	46		39		39		47		51

(1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).

TABLE 10

Geographic Region of Medicine School
Faculty by Mobility Status
(Calendar 1971)

<u>Region</u>	<u>#Schs</u>	<u>Faculty in 1971¹</u>								
		<u>Total¹</u>		<u>New Hires</u>		<u>Transfers</u>		<u>Remained</u>		<u>Departed</u>
Northeast	(35)	11882	100	1055	9	209	2	10618	89	954
South	(33)	7588	100	920	12	188	2	6480	85	607
Midwest	(29)	8272	100	951	12	125	1	7196	87	482
Farwest	(16)	4412	100	417	12	91	2	3904	89	307
<u>TOTAL</u>	(113)	32154		3343		613		28198		2350

Percent distribution by Geographic Region ²						
Northeast		$\frac{100}{37}$	$\frac{100}{32}$	$\frac{100}{34}$	$\frac{100}{38}$	$\frac{100}{41}$
South		24	26	31	23	26
Midwest		26	28	20	26	21
Farwest		14	13	15	14	13

(1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).

(2) Percents may not add to 100% due to rounding.

The distribution of transfers in calendar 1971 was quite similar among three regions, Northeastern, Southern and Western, each with 2 percent of the total faculty from transfers. One percent of the Midwest region faculty were transfers. Regional loss and retention percentages of the faculty who transferred medical schools between 1970 and 1971 are presented in Figure 7. One can note that the Southern region retained the highest percentage of faculty who transferred medical schools (56 percent). The western region was lowest with only 36 percent of its faculty transfers remaining within the region.

The Southern region received the highest percentage of transfers from other regions. The three other regions each lost approximately 25 percent of their transfers to Southern region medical schools.

One can note that the Midwest region schools hired almost two faculty members for every one that left academic medicine in calendar 1971, the highest ratio among the regions. The Northeastern region hired close to 1.1 new persons for every leaver; the Southern region, 1.5; and the Western region, 1.3.

While absolute numbers give a rough estimate of regional mobility activities, they fail to account for lack of equality in the total number of institutions within each region. The Northeastern region has 35 medical schools; the Southern region, 33; the Midwest, 29; and the Western region, 16. In order to account for this lack of proportionality, Table 11 has been devised to give mobility ratios based on faculty movement by total schools in a given region. In other words, for a given region, numerator values contain absolute faculty mobility data, and the denominator values contain the total number of schools in their region.

Table 11 indicates that there were an average of 33 new hires per school in the Midwest region; 30 new hires per school in the Northeastern region; 28 new hires per school in the Southern region; and 26 new hires per school in the Western region, the lowest of the four.

Use of the same procedures for faculty who have left academic medicine indicates that the highest proportion of leavers were from the Northeastern region where medical schools lost to other pursuits 27 faculty members per school, followed by the Western region's 19, the Southern region's 18 and the Midwestern region's rate of 17 per school.

FIGURE 7
 Regional Loss and Retention of Faculty
 Who Transferred Medical School
 (Calendar 1971)

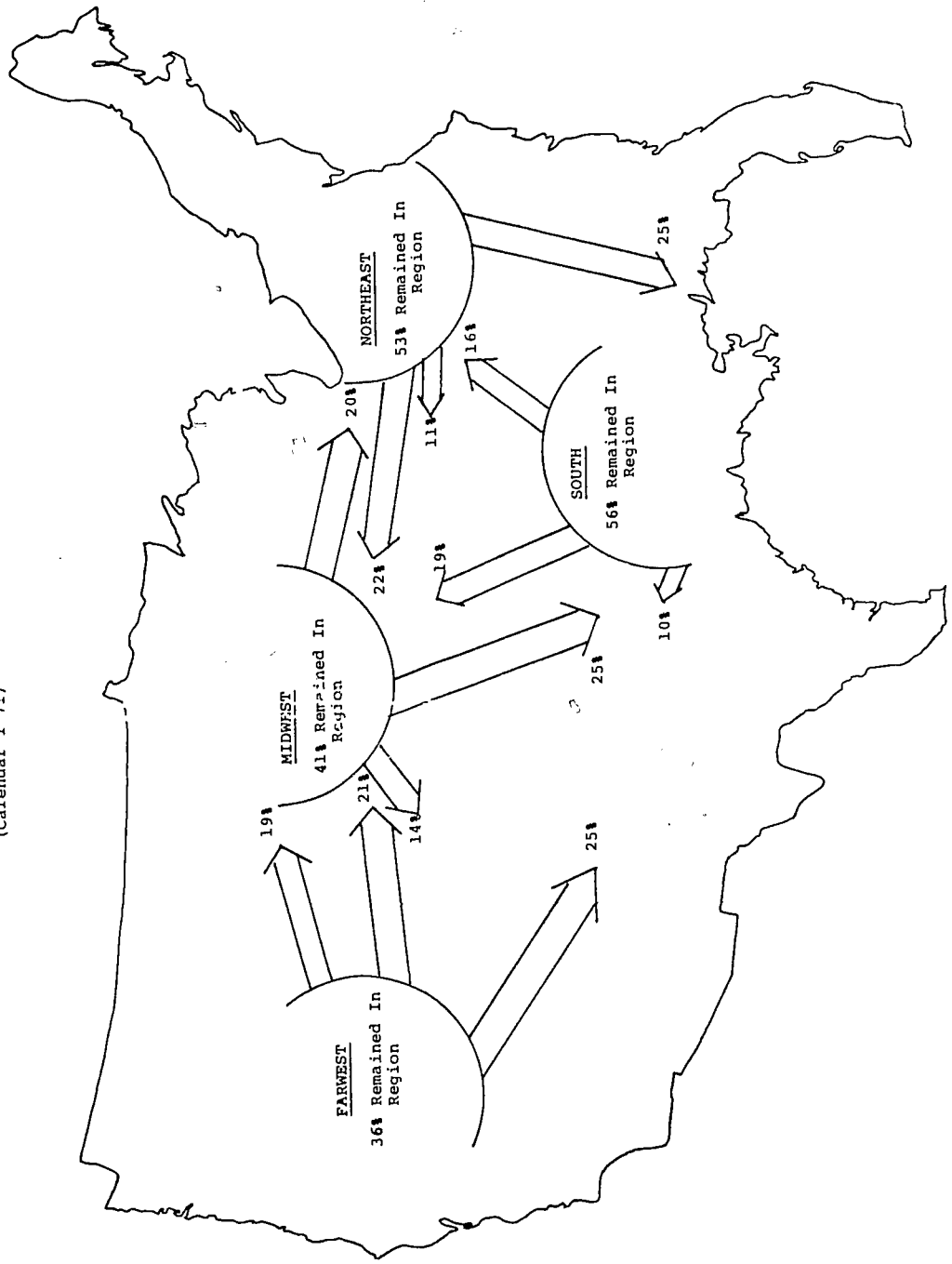


TABLE 11

Medical School Faculty Mobility
 Status By Medical School By
 Geographic Region¹
 (Calendar 1971)

<u>Region</u>		<u>Faculty in 1971</u> ²				<u>Departed</u>
		<u>New Hires</u>	<u>Transfers</u>	<u>New Hires & Transfers</u>	<u>Remained</u>	
Northeast	(35)	30.14	5.97	36.11	303.37	27.26
South	(31)	27.88	5.70	33.58	196.36	18.39
Midwest	(29)	32.79	4.31	37.10	248.14	16.62
Farwest	(16)	26.06	5.69	31.75	244.00	19.19

- (1) Figures in Table computed by dividing number of schools in each region into total number of new hires, transfers, new hires plus transfers, stayers and leavers.
- (2) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).

Department Type

Departments within medical schools have been classified into four major groups in the present study; basic science, pathology, clinical sciences, and a category for "other" departments.

When looking at total faculty by department type, one can note from Table 12 that 19 percent of the total faculty in calendar 1971 were in the basic sciences, seven percent were in pathology, 69 percent of the faculty were in clinical sciences, and the remaining five percent distributed in the other departments.

New hires accounted for 11 percent of the faculty in clinical science departments in 1971, compared to eight percent in the basic sciences and nine percent in pathology. The three major department groups hired approximately the same percentage of transfers during this year.

Table 10 in Appendix B indicates that 91 percent of the M.D. new hires were employed in clinical science departments. Forty-five percent of the Ph.D.'s were in basic sciences with an additional 44 percent in the clinical sciences.

While faculty in the clinical sciences held 69 percent of the total faculty positions in calendar 1971, they accounted for a higher percentage (76 percent) of those who left academic medicine. The percentage of basic science and pathology faculty among those who left academic medicine was lower than the percentage of basic science and pathology faculty in the total faculty count for 1971. One can also note that the high percentage of leaving clinical science faculty closely matched the higher percentage of new hires who were clinical science faculty.

Figure 8 shows the percentage loss of salaried faculty for each primary department for reasons other than leave, retirement or death. One can further note that clinical science departments, in general, had the highest percentages of faculty departing medical schools in 1970.

Most of the movement, then, appears to be in the clinical science departments.

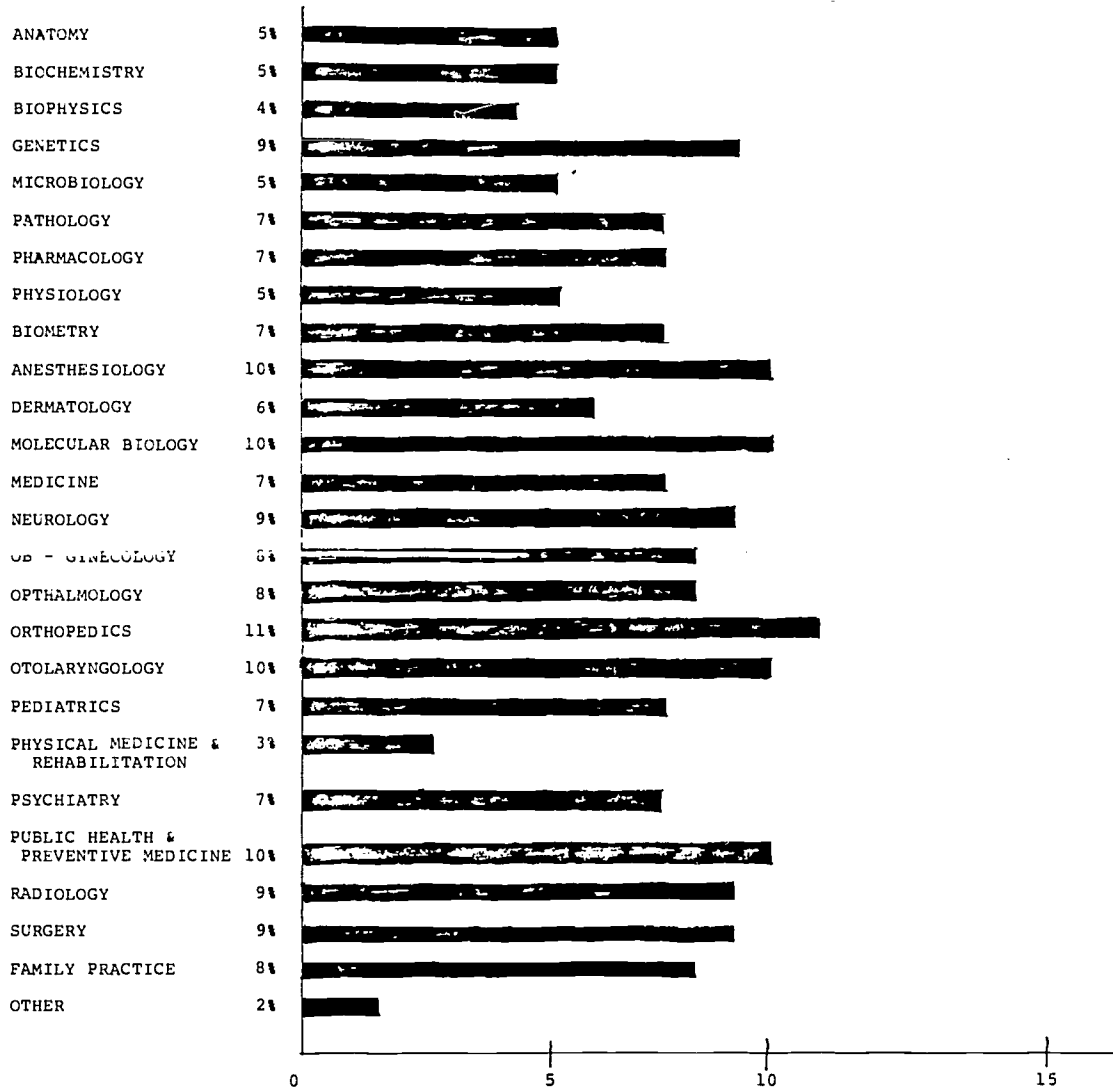
TABLE 12

Department Type of Medical School
Faculty by Mobility Status
(Calendar, 1971)

Department	Faculty in 1971 ¹								Departed #
	<u>Total¹</u>		<u>New Hires</u>		<u>Transfers</u>		<u>Remained</u>		
	#	%	#	%	#	%	#	%	
Basic-Sciences	6017	100	449	8	121	2	5447	91	307
Pathology	2119	100	189	9	51	2	1879	89	144
Clinical Sciences	22330	100	2520	11	417	2	19393	87	1775
Other Depts.	1688	100	185	11	24	1	1479	88	124
TOTAL	32154		3343		613		28198		2350
Percent distribution by Department Type									
	<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>
Basic Sciences	19		13		20		19		13
Pathology	7		6		8		7		6
Clinical Sciences	69		75		68		69		76
Other Depts.	5		6		4		5		5

(1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).

FIGURE 8
 FACULTY ATTRITION¹
 BY MEDICAL SCHOOL PRIMARY
 DEPARTMENT
 (CALENDAR 1971)



(1) Loss of salaried faculty manpower at an institution for reasons other than leave, retirement or death.

Age of Institution

One topic of interest related to faculty mobility concerns the flow of transfers and new hires into medical schools as observed by the age of the employing institution. In the present study, institutions have been classified into three age groups. The seventy-six schools established before 1946 comprised the oldest group. Ten schools were established post World War II, between 1946 and 1963, and comprise the second group. Twenty-seven schools represent the youngest group and have been established since 1964.

Overall, 81 percent of the total U.S. faculty in calendar 1971 are employed by institutions established prior to 1946. Eleven percent of the faculty are in schools established between 1946 and 1963 and 8 percent of the total U.S. faculty are in schools that were established since 1964.

As would be expected, Table 13 indicates that the greatest increase of faculty from new hires was found at the youngest schools where new hires accounted for 15 percent of their total faculty in calendar 1971, as compared to 10 percent for the older schools. Furthermore, the transfers into the new schools accounted for 6 percent of the total faculty, as compared to 2 percent for the older schools.

Though faculty in medical schools established since 1964 account for only eight percent of the total faculty in calendar 1971, they account for an even lower percentage (6 percent) of faculty who left academic medicine.

TABLE 13

Mobility Status of Medical
School Faculty By Age
of Institution
(Calendar 1971)

Age of Institution	Faculty in 1971 ¹									
	<u>Total¹</u>		<u>New Hires</u>		<u>Transfers</u>		<u>Remained</u>		<u>Departed</u>	
	#	%	#	%	#	%	#	%	#	
Before 1946	26051	100	2598	10	389	1.5	23064	89	1901	
1946-1963	3529	100	359	10	69	2.0	3529	88	265	
1964 to Present	2574	100	386	15	155	6.0	2033	80	139	
<u>TOTAL</u>	32154		3343		613		28198		2305	
Percent distribution by Age of Institution ²										
	<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>		<u>100</u>	
Before 1946	81		78		64		82		82	
1946-1963	11		11		11		11		11	
1964 to Present	8		12		25		7		6	

(1) Does not include departed faculty (1970 faculty who did not return to academic medicine in 1971).

(2) Percent may not add up to 100% due to rounding.

SUMMARY

New Hires

The faculty new to the medical school universe in calendar 1971 accounted for 10 percent of the total faculty force in that year.

Most of the new faculty were M.D.'s (60 percent), but new Ph.D.'s accounted for 25 percent of the total.

While new female faculty represented a fraction of the new hires (17 percent) greater than their total representation at medical schools nationally (15 percent), they made up a smaller proportion of the new M.D.'s and Ph.D.'s. Forty-one percent of the female new hires had a master's degree or less, compared to 5 percent of the male new hires in the same degree categories.

A substantial fraction of the new hires (41 percent) were between 30 and 34 years of age. Generally, the M.D.'s were older than newly hired faculty in all other degree categories.

Four out of 5 newly hired faculty were either assistant professors or instructors, usually considered nontenured ranks.

Medical schools hired 7 out of every 10 new faculty members as strict full-time employees.

As would be expected, the modal number of responsibilities for newly hired M.D.'s was three (teaching, research, patient care), and the modal number of responsibilities for Ph.D. new hires was two (teaching, research).

Foreign graduates accounted for 18 percent of the new hires which was higher than the percentage of foreign graduates in the total faculty (15 percent). Canadian graduates were the most stable with 1.6 percent of their faculty accounted for in the new hires and 1.8 percent in the faculty total. Newly hired Canadian and U.S. graduates accounted for one out of every ten faculty members within their own graduate groups.

Only 21 percent of the new hires had received some sort of predoctoral support, a lower percentage than that to total faculty with pre-doctoral support (25 percent). It was also noted that 71 percent of the newly hired faculty who had pre-doctoral support were Ph.D.'s.

New hires had the lowest percentage of faculty with postdoctoral support (35 percent), compared to all other mobility categories. While 71 percent of those who had pre-

doctoral support were Ph.D.'s, 63 percent of the new hires with post-doctoral support were M.D.'s.

Publicly owned medical schools hired 2,025 new faculty members in calendar 1971, which was an average of close to 30 new faculty members for each school. There were 1,318 new hires in the privately owned schools, yielding a comparable average of 29 new faculty members for each school.

When looking at faculty employment in terms of geographic location of medical schools, it was noted that there was an average of 30 new hires per school in the Northeastern region; 28 new hires per school in the Southern region; 33 new hires per school in the Midwest region and 26 new hires per school in the Western region.

New hires accounted for 11 percent of the faculty in clinical science departments in 1971, compared to eight percent in the basic sciences and nine percent in pathology.

As would be expected, schools which were established between 1964 and the present had higher proportions of new hires.

Faculty Transfers

The faculty who transferred medical schools between 1970 and 1971 accounted for 1.9 percent (N=613) of the total faculty in 1971. Seventy-five percent of those who transferred had an M.D. degree. Only nine of the transfers had a Master's degree or less.

The transfers were slightly older than the new hires. Sixty-nine percent of the transfers were between the ages of 35 and 39, and 11 percent were over 50 years of age.

For every 10 transfers in 1971, 9 of them were male faculty. Only 50 female faculty members transferred medical schools between 1970 and 1971.

The highest number of transfers within an academic rank was 239 at assistant professor. The lowest number of transfers was 8 at the lecturer level.

Seventy-six percent of the transfers were employed as strict full-time, a greater percentage than the fraction of strict full-time faculty in the total faculty (71 percent) or in the group of new hires (73 percent).

The transfers looked quite similar to new hires when compared by their country of training. Foreign graduates accounted for 18 percent of the faculty transfers, a greater number than the percentage of foreign graduates in the total

faculty (15 percent). Among faculty who were Canadian graduates, 1.5 percent were transfers.

When comparing faculty in 1971 on the extent of pre-or post-doctoral support, it was observed that the faculty who transferred medical schools had higher percentages of both types of support than did the new hires. While 25 percent of the total faculty had some sort of predoctoral support, the group of transferred faculty had a higher percentage of persons with pre-doctoral support (26 percent) than did newly hired faculty (21 percent). When looking at post-doctoral support, the group of transferred faculty was the only category of faculty with a higher percentage of persons with such support (55 percent) than without it.

The transfers looked quite similar to new hires when compared by the type of ownership of the medical school of new employment. For both new hires and transfers, 61 percent were employed at public institutions and 46 percent were employed at private institutions.

When looking at transferred faculty in terms of geographic location of new employment, it was noted that there was an average increase of 6 transfers per school in each of the Northeastern, Southern, and Western regions. The Midwest region was the lowest with 4 transfers. It was interesting to note that while the Midwest region has the lowest ratio of transfers among the four regions, it contained the highest ratio of new hires per school.

Although transfers accounted for approximately 2 percent of the total faculty across major departments, 20 percent of the transfers went into basic science departments, compared to 13 percent of the new hires. Transfers entered clinical science departments in lower proportions (68 percent) than did new hires (75 percent).

Some interesting observations can be made concerning the age of the institution and employment patterns in 1971. Transfers employed at institutions that were established prior to 1964 accounted for 2 percent of faculty. For institutions established since 1964, however, 6 percent of the faculty were newly hired transfers in 1971. It was further noted that one out of every four faculty who transferred in 1971 were employed at the new schools even though the new schools account for only 8 percent of all U.S. medical school faculty.

Departed Faculty

In the present study it was found that 2,350 persons terminated their faculty positions and failed to return to employment as a salaried faculty member in 1971. Twenty-three percent of the departing M.D.'s left academic medicine

for private practice. Ten percent of the departing Ph.D.'s transferred to faculty positions in academic institutions other than medical schools.

When comparing exiting faculty by their degrees, it was noted that 1,473 M.D.'s did not return to salaried positions and accounted for 63 percent of all faculty who left. Four hundred forty-seven Ph.D.'s did not return (19 percent of the leavers), and 312 faculty with the Master's degree or less (14 percent of the leavers) failed to return. The percentage of M.D. faculty who left (63 percent) was slightly higher than the percentage of M.D.'s in the 1971 totals (60 percent). The loss for Ph.D.'s was lower (19 percent) than the percentage of Ph.D.'s in the 1971 totals (26 percent).

That almost half of the leavers were between 30 and 39 years of age tends to suggest that most faculty left for other employment pursuits.

When looking at sex, it was found that 1,939 male faculty or 83 percent did not return to academic medicine, a percentage lower than the fraction of males in the total 1971 faculty. There were 392 women faculty who left, a slightly higher percentage (15 percent) of the leavers than the percentage of women in the total faculty of 1971. It was also noted that, for men, higher percentages of faculty leave with the M.D., Ph.D., and Bachelor's degrees, but that for women, faculty leaving with the Master's degree outnumbered men by almost two to one.

The highest number of leavers by academic rank were Assistant Professors with 783 leaving academic medicine. Instructors were next highest, losing 707. These ranks combined accounted for 65 percent of departing faculty in 1971.

Sixteen percent of the leavers were part-time salaried faculty, a higher percentage than the percentage of part-timers (12 percent) in the faculty totals in 1971. However, percentages of departed faculty with strict full-time appointments (67 percent) and geographic full-time appointments (17 percent) were found to be lower than the percentages for those categories in the faculty totals for 1971.

Of those faculty who left, most did teaching and research (382), followed closely by faculty who did teaching, research and patient care (340). By academic degree, the modal number of responsibilities for both leaving M.D.'s and Ph.D.'s was two, namely teaching and research.

While foreign trained faculty represented 15 percent of the total faculty force in 1971, they represented 19 percent

of those who left the preceeding year. The Canadian graduates accounted for 2.2 percent of the departed faculty, a comparable percentage to the 1.8 percent of Canadian graduates in the total faculty in 1971. U.S. graduates accounted for 79 percent of those who left academic medicine.

Faculty who had received some sort of prior pre-doctoral were represented in greater proportion (28 percent) than they were in the total 1971 faculty (25 percent). It was also noted that fifty-eight percent of those with pre-doctoral support who left academic medicine were Ph.D.'s. Seventy percent of those with post-doctoral support who left were M.D.'s.

The number of faculty leaving academic medicine was quite similar numerically for both public and private medical schools in calendar 1971. 1,160 (49 percent of the leavers) faculty left academic medicine from public institutions, and 1,190 (51 percent of the leavers) faculty left from private institutions. However, since there are more faculty on staff at publicly owned institutions, the differential attrition is ever greater. Private schools combined lost an average of 26 salaried faculty per school, while the combined average loss of salaried faculty per public school was 17.

When looking at faculty attrition by geographic region, it was noted that the schools in the Northeastern region had the highest average attrition at 27 per school. The Western schools had the next highest loss with 19 per school followed by the Southern region at 18 and the Midwest region at 17 per school.

Seventy-six percent of all faculty who left academic medicine were in the clinical science departments, while only 69 percent of the 1971 total faculty were in clinical science departments. It was also noted that 71 percent of those who left with a Master's degree were in the clinical science departments. Additionally, 52 percent of those who left with a Bachelor's degree or less were in clinical science departments.

Though faculty in medical schools established since 1964 account for only eight percent of the total faculty in 1971, they accounted for an even lower percentage (6 percent) of faculty who left academic medicine.

FOOTNOTES

¹ JAMA, Vol. 218 #8, November 22, 1971

² JME, Vol. 46 #8, August 1971. AAMC Faculty Roster, 1972.

³ All persons who were salaried faculty members at an AAMC recognized medical school in either calendar 1970 and/or 1971 and had valid employment dates were classified into four mutually exclusive mobility categories; new hires, transfers, remainers and departers.

New Hires are faculty who were not at a medical school in calendar 1970 but were salaried faculty in calendar 1971. This group consists of those who have their first appointment ever to a medical school and those who may have been former medical school faculty members but not in calendar 1970.

Transfers are faculty who were employed at one medical school in calendar 1970 and a different medical school in calendar 1971. This group does not include persons who transferred faculty appointments from a non-medical school in calendar 1970 to a medical school in 1971. Such persons are considered as new hires for the medical school universe.

Remainers are faculty who remained on the roster at the same medical school in both calendar 1970 and 1971.

Departers are faculty who were employed at a medical school in calendar 1970 but did not return to any medical school in calendar 1971.

An additional 3,390 faculty were omitted from the analyses in report 1 because missing or unreliable data on their employment location in 1970 and/or 1971 made it impossible to determine if they were newly hired, transferred or had remained at the same location or left academic medicine for the purpose of the present survey. Therefore, figures for each mobility category are to be interpreted as lower bound estimates.

⁵ Faculty questionnaires were submitted by the AAMC to 113 medical schools to update data on faculty in the 1971-72 school year. The following four schools failed to return the updated questionnaires: University of Maryland School of Medicine, St. Louis School of Medicine, Rutgers Medical School, Washington University School of Medicine (St. Louis). Moreover, six schools failed to update at least 50 percent of their data on faculty. Cornell University Medical College, Chicago Medical School, Northwestern University Medical School, University of Tennessee College of Medicine, Tufts University School of

Medicine, and the University of Washington School of Medicine. Hence, the reader is reminded that absolute numbers given in the present report are considered as lower bound estimates of the true counts in new hires, transfers and/or departers.

*AAMC Regional Groupings of Medical Schools

- (1) Northeastern Region States:
Connecticut, District of Columbia, Maryland, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont.
- (2) Southern Region States:
Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Tennessee, Texas, Virginia and West Virginia.
- (3) Midwest Region States:
Illinois, Indiana, Iowa, Kansas, Michigan, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin.
- (4) Western Region States:
Arizona, California, Colorado, Hawaii Nevada, New Mexico, Oregon, Utah and Washington.

7The Department Groupings are as Follows:

- (1) Basic Sciences-
Basic Sciences; Anatomy, Biochemistry, Biophysics, Genetics, Microbiology, Pharmacology Physiology, Mathematics in Medicine.
- (2) Pathology-
Pathology, Laboratory Medicine
- (3) Clinical Sciences-
Anesthesiology, Dermatology, Biology in Medicine, Internal Medicine, Neurology, Obstetrics & Gynecology, Ophthalmology, Pediatrics, Physical Medicine and Rehabilitation, Psychiatry, Public Health and Preventive Medicine, Radiology, Surgery, Family Practice, Clinical Sciences, Nuclear Medicine.
- (4) "Other" Departments
Legal Medicine, Educational Resources, Graduate Medical Education, Veterinary Sciences, Library, Allied Health and

Behavioral Sciences, Art in Medicine.
Administration

-52-

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BIBLIOGRAPHY

- Brown, David G., The Mobile Professors, American Council on Education, Washington, D.C., 1967
- Caplow, Theodore and McGee, Reece, The Academic Market Place, New York: Basil Books, Inc., 1958.
- Christie, Richard and Merton, Robert, "Procedures for the Sociological Study of the Values Climate of Medical Schools", Journal of Medical Education, 33, (October, 1958, Part II) pp. 25-53.
- Coker, Jr. Robert, Back, K. Donnelly, T. and Miller, N. "Patterns of Influence: Medical School Faculty Members and the Values and Specialty Interests of Medical Students" Journal of Medical Education, 35, No. 6, pp. 518-527.
- Dunham, Ralph., Wright, Patricia., Chandler, Marjorie "Teaching Faculty in Universities and Four-Year Colleges, Spring 1963" Office of Education, U.S. Department of Health, Education and Welfare, Washington, D.C, 1966.
- Kendall, Patricia and Hannan L. Selvin "Tendencies toward Specialization in Medical Training" in Robert K. Merton et. al. The Student Physician, Cambridge, Mass: Harvard University Press, 1957, pp. 153-74.
- Lyden, F. J., Geiger, H. J. and Peterson, O. C.; The Training of Good Physicians, Cambridge, Mass, Harvard University Press, 1968.
- Paiva, Rosalia, Juan, I., and H. Haley, "Factors in Internship Choice", Journal of Medical Education, Vol 49, No. 4, April, 1974.

APPENDICES

APPENDIX A

Salaried Medical Faculty
Questionnaire

DATE OF FORM COMPLETION

Mo. Day Yr.

SALARIED MEDICAL FACULTY QUESTIONNAIRE (Faculty Profile - New Accession Form)

AAMC Form FP-1 Rev 9/73

MEDICAL SCHOOL OF CURRENT EMPLOYMENT

NAME (Surname) (First) (Middle Initial or Name) 2. SEX Male Female 3. SOC. SEC. No.

4. BIRTHDATE Mo. Day Yr. 5. BIRTHPLACE (Country) 6. CURRENT CITIZENSHIP (Country)

7. FORMER CITIZENSHIP (If U.S. Naturalized) (If U.S. Citizen by Birth, Enter "NA" - Not Applicable)

75. ETHNIC GROUP Because of interest and concern regarding employment opportunities for ethnic minorities, you are requested to indicate below in which ethnic group you consider yourself. (Check One)

8. DATE OF U.S. NATURALIZATION Mo. Day Yr.

- 1-Black American 2-American Indian 3-Mexican American 4-Puerto Rican 5-Other Spanish Surnamed 6-Oriental (Chinese or Japanese) 7-Other Asian 8-Caucasian 9-Other 0-Do Not Wish To Respond

9. VISA STATUS: (If Currently an Alien) TEMPORARY PERMANENT

76. OPTIONAL INFORMATION (For school use only)

CURRENT APPOINTMENT DATA:

10. MEDICAL SCHOOL DEPARTMENT (Or Administrative Unit Equal to or Above Dept. Level) 11. ACADEMIC RANK

12. ADMINISTRATIVE TITLE (If No Title, Enter "NONE")

13. JOINT DEPARTMENT (If No Joint Dept., Enter "NONE")

14. JOINT DEPT. ACADEMIC RANK

15. JOINT DEPT. ADMINISTRATIVE TITLE (If No Title, Enter "NONE")

CHECK ONE OF THE BOXES BELOW, INDICATING THE JOINT DEPARTMENT'S "LOCATION"

- MS - Medical school HS - Other health profession school within the university OD - Other division of the university OI - Other institution, e.g., another institution of higher education or an affiliated hospital

16. SPECIALTY OR DISCIPLINE: Enter below the specialty(s) or discipline (s) from the Specialty/Discipline List which best describe(s) your current activities.

NAME (Middle Initial or Name) (First) (Surname) DEPARTMENT

16. 16A.

17. MAJOR AREAS OF RESPONSIBILITY: Should indicate major functional emphasis of activity in any combination of Teaching, Research, Patient Care, Administration, or Other. Check all that apply. If a primary responsibility exists, enter the letter "P" in appropriate box. Primary responsibility should reflect predominant area of activity in which major effort is directed over and above other areas of major activity, when appropriate.

- TEACHING RESEARCH PATIENT CARE ADMINISTRATION OTHER

18. NATURE OF EMPLOYMENT: (Check one)

- SFT Strict full-time in medical school GFT Geographic full-time in medical school PTS Part-time salaried in medical school NS Non-salaried SFTA Strict full-time in affiliated institution* GFTA Geographic full-time in affiliated institution* PTSA Part-time salaried in affiliated institution* (Usually teaching hospitals)

18A. If Nature of Employment is SFTA, GFTA, or PTSA (See Item 18) enter name of affiliated institution

19A. Beginning Month and Year of current employment as a salaried faculty member at this school

26. From which of the following sources did you ORIGINALLY enter U.S. Medical School Salaried Academic Employment? (Check only one)

PROFESSIONAL TRAINING

- 40 U.S. Medical School
 - 42 Other U.S. Educational Institution
 - 44 Internship or Residency
 - 46 NIH Training Program
 - 47 NIMH Training Program
 - 48 Other Training Program
 - 50 Foreign Educational Institution
- PROFESSIONAL EMPLOYMENT
- 10 Volunteer Faculty - This Medical School
 - 11 Volunteer Faculty - Other U.S. Medical School
 - 12 Other U.S. Educational Institution
 - 14 Foreign - Academic
 - 16 Foreign - Non-Academic
 - 18 Private Practice of Medicine
 - 19 U.S. Active Military Service
 - 20 U.S. Govt. - DOD & Military Hosps.
 - 22 U.S. Govt. - PHS (Include PHS Hosps. NIH & NIMH)
 - 24 U.S. Govt. - Veterans Admin. (Include VA Hosps.)
 - 26 U.S. Govt. - Other
 - 28 U.S. Hospital (Non-Federal)
 - 30 Foundation (or Research Institute)
 - 34 State or Local Govt. (U.S.)
 - 36 Private Business or Industry
 - 98 Other (Specify) _____

PAST PROFESSIONAL EMPLOYMENT HISTORY:

YEARS	TYPE OF EMPLOYMENT (If Academic, Enter School Name and Location) (If Non-Academic, Enter From Above Professional Employment List)	MAJOR AREAS OF RESPONSIBILITY (d)				COMPLETE COLUMNS (e)-(h) FOR MEDICAL SCHOOL EMPLOYMENT ONLY				
		TEACHING	RESEARCH	PATIENT CARE	ADMIN.	OTHER	DEPARTMENT	NATURE OF EMPLOYMENT (f)	ACADEMIC RANK	ADMINISTRATIVE TITLE
(a) (b) (c)										
20										
21										
22										
23										
24										
25										

26A. YEAR OF YOUR FIRST U.S. MEDICAL SCHOOL SALARIED FACULTY APPOINTMENT _____

27. HAVE YOU EVER SERVED AS A VOLUNTEER NON-SALARIED FACULTY MEMBER AT A U.S. MEDICAL SCHOOL? YES NO 28. LATEST YEAR _____

EARNED DEGREES:

LIST ALL EARNED DEGREES AT THE BACHELOR'S LEVEL AND ABOVE. (Two degrees at the same level may not be entered on the same line. In such cases, enter the more recent.)

29. IF NO EARNED DEGREES, PLEASE CHECK

M.D., D.O., OR FOREIGN EQUIVALENT PH.D OR EQUIVALENT OTHER HEALTH RELATED DOCTORATE MASTERS BACHELORS	SPECIFY DEGREE (a)		FIELD OF STUDY (Select from Specialty/Discipline List) (b)	INSTITUTION CONFERRING DEGREE (c)	STATE (If U.S.) COUNTRY (If Foreign)	YEAR COMPLETED (d)
30			MEDICINE			
31						
32						
33						
34						

ITEMS 36-54 TO BE COMPLETED BY M.D.'S, D.O.'S OR FOREIGN EQUIVALENT ONLY

INTELSHIPS IN THE U.S.A.		HOSPITAL (a)	CITY	STATE	YEAR COMPLETED (b)	
36 NONE <input type="checkbox"/>						
37						
38						
RESIDENCIES IN THE U.S.A.		HOSPITAL (a)	CITY	STATE	RESIDENCY PROGRAM (b)	YEAR COMPLETED (c)
39 NONE <input type="checkbox"/>						
40						
41						
42						
43						

U.S. MEDICAL SPECIALTY BOARD CERTIFICATION: 45 NONE 46 FIRST CERTIFICATION _____ 47 YEAR _____ 48 SECOND CERTIFICATION _____ 49 YEAR _____
 FOREIGN MEDICAL SPECIALTY CERTIFICATION: 52 NONE 53 SPECIALTY _____ 54 YEAR _____

PRE- AND POSTDOCTORAL SUPPORT:

(Select responses for Purpose and Source of Award from the lists below)

- | | |
|------------------------------------|------------------------|
| PURPOSE | SOURCE OF AWARD |
| 01 Complete Degree * | 11 NIH |
| 02 Complete Additional Doctorate * | 12 PHS |
| 03 Specialty Training | 15 CPEHS |
| 04 Teaching Only | 14 HSMHA |
| 05 Research Only | 16 SRS |
| | 17 SSA |
| | 18 OE |
| | 13 DHEW-Other |
- *Use for Predoctoral only.

SOURCE OF AWARD

Abbreviations

- | | |
|---|------------------------------|
| National Institutes of Health | 24 NSF |
| Other Public Health Service | 23 VA |
| Consumer Protection & Environmental Health Service | 25 FED-Other |
| Health Services & Mental Health Admin. (incl. NIMH) | 46 ACAD |
| Social Rehabilitation Service | 45 ACAD-F |
| Social Security Admin. | 35 FOR |
| Office of Education | 38 FDN |
| All other-Dept. Health, Education & Welfare | 37 IND |
| | 90 All Other, please specify |

PREDOCTORAL SUPPORT (LIST SUPPORT FOR SIX MONTHS DURATION OR LONGER)

55 NONE <input type="checkbox"/>	INSTITUTION OF TRAINING (a)	DISCIPLINE (b) (Select from Specialty/Discipline List)	PURPOSE (c)	SOURCE OF AWARD (d)	Years	
					From (e)	To (f)
56						
57						
58						

POSTDOCTORAL SUPPORT (LIST SUPPORT FOR SIX MONTHS DURATION OR LONGER)

59 NONE <input type="checkbox"/>	INSTITUTION OF TRAINING (a)	DISCIPLINE (b) (Select from Specialty/Discipline List)	PURPOSE (c)	SOURCE OF AWARD (d)	Years	
					From (e)	To (f)
60						
61						
62						
63						

CURRENT PARTICIPATION IN NIH TRAINING GRANTS (exclude NIMH): (Use one line per training grant)

	DISCIPLINE (Select From Specialty/Discipline List)		DIRECTOR (b)	STAFF (c)	Salary Support	
	(a)				Yes (d)	No (e)
64 NONE <input type="checkbox"/>						
65						
66						
67						

CURRENT PARTICIPATION IN OTHER FEDERAL PROGRAMS: (including NIH)

(Select responses for Federal Agency and Name of Sponsoring Agency's Program from the lists below.)

	FEDERAL AGENCY (a)	NATURE OF PROGRAM ACTIVITY (b)			NAME OF SPONSORING AGENCY'S PROGRAM (c)	Salary Support		
		Teaching	Research	Patient Care		Other	Yes (d)	No (e)
68 NONE <input type="checkbox"/>								
69								
70								
71								
72								
73								

FEDERAL AGENCY (From Which Funds Are Received)

Abbreviations

- 02 NIH National Institutes of Health
- 04 HSMHA-RMP Health Services & Mental Health Admin. - Regional Medical Program
- 06 HSMHA-Other Health Services & Mental Health Admin.-Other (incl. NIMH)
- 07 CPEHS Consumer Protection & Environmental Health Service
- 08 SRS Social Rehabilitation Service
- 10 SSA Social Security Admin.
- 11 OE Office of Education
- 12 DHEW-Other All other-Dept. Health, Education & Welfare
- 14 OEO Office of Economic Opportunity
- 16 VA Veterans Administration
- 18 NSF National Science Foundation
- 20 AEC Atomic Energy Commission
- 22 NASA National Aeronautics & Space Admin.
- 24 DOD Dept. of Defense
- 26 Fed-Other Federal - Other (Specify)

NAME OF SPONSORING AGENCY'S PROGRAM

(Should designate sponsoring agency's program in which faculty member participates)

- Abbreviations
- 01 BIG NIH basic improvement grant
- 03 SIG NIH special improvement grant
- 05 GRSG NIH general research support grant
- 07 RPG NIH research project grant or contract
- 09 PAP Physician augmentation program
- 11 RMP Regional Medical Program
- 13 MiC Maternal & infant care center
- 15 CYC Children & youth center
- 17 CHC Community health center
- 19 Comp HC Comprehensive health center
- 23 RCDA Research career development award
- 25 HSMHA HSMHA neighborhood health center
- 27 Other-DHEW Other DHEW research grants or contracts
- 29 Other-Fed. Other Federal research grants or contracts

APPENDIX B

TABLES

APPENDIX TABLE
1
Age of Newly Hired
Faculty Members by Degree
(Calendar 1971)

Age	MD&PhD		MD Only		PhD Only		Master's		Bachelor's or Assoc.		Total #
	1 ¹	2 ²	1 ¹	2 ²	1 ¹	2 ²	1 ¹	2 ²	1 ¹	2 ²	
Below 25	--	--	10	1	1	() ²	7	3	7	7	25 ³
25-29	2	2	162	8	168	21	84	32	38	40	454
30-34	20	24	920	45	347	43	66	25	19	20	1372
35-39	20	24	534	26	136	17	34	13	14	15	738
40-44	18	21	183	9	76	9	30	11	5	5	312
45-49	11	13	104	5	47	6	23	9	6	6	191
50-54	5	6	73	4	15	2	8	3	3	3	104
55-59	4	5	35	2	12	2	6	2	3	3	60
60-64	2	2	23	1	5	1	4	2	--	--	34
Above 64	2	2	14	1	3	() ²	1	() ²	1	1	21
TOTAL	84	(100)	2058	(100)	810	(100)	263	(100)	96	(100)	3311 ³
ROW %	3		63		24		8		3		

(1) Vertical Percentage Only

(2) Less than 0.5%

(3) Excludes 27 whose degree was not reported.

APPENDIX TABLE

2

Sex of Newly Hired
Faculty Members by Degree
(Calendar 1971)

<u>Sex</u>	<u>MD & PhD¹</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Male	79	94	1840	90	682	84	108	41	41	43	2750
Female	5	6	208	10	129	16	154	59	55	57	551
Total	84	(100)	2048	(100)	811	(100)	262	(100)	66	(100)	3301
Row %	3		63		24		8		3		

(1) Vertical Percentage

(2) Excludes 27 whose degree was not reported.

APPENDIX TABLE

3

Academic Rank of Newly Hired
Faculty Members By Degree
(Calendar 1971)

Rank	MD&PhD		MD ONLY		PhD ONLY		Master's		Bachelor's or Assoc.		Total	
	#	% ¹	#	%	#	%	#	%	#	%	#	%
Full Prof.	15	18	84	4	43	5	1	() ²	--	--	143	
Assoc. Prof.	18	21	114	6	86	11	3	1	1	1	222	
Asst. Prof.	39	46	857	42	426	53	31	12	6	7	1362	
Instructor	11	13	876	43	183	23	180	70	60	65	1310	
Lecturer & Other	1	1	116	6	70	9	42	16	26	28	255	
TOTAL	84	(100)	2047	(100)	808	(100)	257	(100)	93	(100)	3289	
ROW %	3		63		24		8		3			

(1) Vertical percentage only

(2) Less than 0.5%

(3) Excludes 26 whose degree was not reported.

APPENDIX TABLE

4

Nature of Employment of Newly
Hired Faculty By Degree
(Calendar 1971)

<u>Employment</u>	<u>MD&PhD</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%¹</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Strict Full- Time	62	74	1382	68	651	82	213	81	79	87	2387
Geographic Full-Time	16	19	376	19	78	10	26	10	3	3	499
Part-Time Salaried	6	7	270	13	67	8	24	9	9	10	376
Total	84	(100)	2028	(100)	796	(100)	263	(100)	91	(100)	3262
Row %	3		63		24		8		3		

(1) Vertical percentage only

(2) Excludes 27 whose degree was not reported.

APPENDIX TABLE

5

Country of Training of Newly
Hired Faculty by Degree
(Calendar 1971)

<u>Country</u>	<u>MD&PhD</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	% ¹	#	%	#	%	#	%	#	%	
U.S.	37	44	1535	75	744	92	250	95	93	97	2659
Canadian	2	2	35	2	15	2	1	() ²	--	--	53
Foreign	44	52	475	23	50	6	8	3	3	3	580
Unknown	1	1	16	1	3	() ²	4	2	--	--	24
Total	84	(100)	2061	(100)	812	(100)	263	(100)	96	(100)	3316
Row %	3		63		24		8		3		

(1) Vertical percentage only

(2) Less than 0.5%

(3) Excludes 27 whose degree was not reported.

APPENDIX TABLE

6

Pre doctoral Support Of
Newly Hired Faculty Members
By Degree
(Calendar 1971)

<u>Support</u>	<u>MD&PhD</u> ¹		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	%	#	%	#	%	#	%	#	%	
No pre doctoral Support	60	73	1850	94	309	39	212	84	82	89	2513
Pre doctoral Support	22	28	122	6	479	61	41	16	10	11	674
TOTAL	82	(100)	1972	(100)	788	(100)	253	(100)	92	(100)	3187
ROW %	3		62		25		8		3		

(1) Vertical Percentage Only

(2) Excludes 26 whose degree was not reported.

APPENDIX TABLE
7
Post doctoral Support Of
Newly Fired Faculty By Degree
(Calendar, 1971)

<u>Support</u>	<u>MD&PhD</u> ₁		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	%	#	%	#	%	#	%	#	%	
No Post Doctoral Support	37	45	1279	64	423	54	258	100	94	99	2091
Post doctoral Support	46	55	717	36	367	47	-	-	1	1	1131
TOTAL	83	(100)	1996	(100)	790	(100)	258	(100)	95	(100)	3222
ROW %	3		62		25		8		3		

(1) Vertical Percentage Only

(2) Excludes 26 whose degree was not reported.

APPENDIX TABLE

8

Institutional Ownership of Newly
Hired Faculty By Degree
(Calendar 1971)

<u>Ownership</u>	<u>MD&PhD</u> ¹		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Public	54	64	1206	59	514	63	106	63	68	71	2008
Private	30	36	855	42	298	37	97	37	28	29	1308
Total	84	(100)	2061	(100)	812	(100)	263	(100)	96	(100)	3316 (100)
Row %	3		63		24		8		3		

(1) Vertical percentage only

(2) Excludes 27 whose degree was not reported.

APPENDIX TABLE

9

Geographic Region of Newly Hired
Faculty Members By Degree
(Calendar 1971)

<u>Region</u> (Schools)	<u>MD&PhD</u>		<u>MD only</u>		<u>PhD only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%¹</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Northeast (35)	22	37	724	43	221	33	62	26	18	25	1047
South (33)	27	22	501	20	274	29	82	31	30	26	914
Midwest (29)	17	28	619	29	197	27	74	30	36	39	943
Farwest (16)	18	12	217	8	120	12	45	13	12	10	412
<hr/>											
Total	84	(100)	2061	(100)	812	(100)	263	(100)	96	(100)	3316
Row %	4		64		23		7		3		

(1) Vertical Percentage

(2) Excludes 27 whose degree was not reported.

APPENDIX TABLE
 10
 Department of Newly Hired
 Faculty Members By Degree
 (Calendar 1971)

<u>Department</u>	<u>MD&PhD</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	% ¹	#	%	#	%	#	%	#	%	
Basic Science	22	26	31	2	369	45	15	6	10	10	447
Pathology	11	13	135	7	29	4	9	3	4	4	188
Clinical Sciences	51	61	1876	91	356	44	166	63	50	52	2499
Other Depts.	--	--	19	--	58	7	73	28	32	33	182
Total	84	(100)	2061	(100)	812	(100)	263	(100)	96	(100)	3316
Row %	3		63		24		8		3		

(1) Vertical Percentage

(2) Excludes 27 whose degree was not reported.

APPENDIX TABLE
¹¹
 Newly Hired Medical School
 Faculty By Age of Institution
 and Degree
 (Calendar 1971)

Age of Institution	MD&PhD ¹		MD Only		PhD Only		Master's		Bachelor's or Assoc.		Total
	#	%	#	%	#	%	#	%	#	%	
Before 1946	61	73	1630	79	610	75	205	78	73	76	2579
1946-1963	14	17	217	11	79	10	31	12	12	13	353
1964 - Present	9	11	214	10	123	15	27	10	11	12	384
Total	84 (100)		2061 (100)		812 (100)		263 (100)		96 (100)		3316
Row %	3		63		24		8		3		

(1) Vertical Percentage

(2) Excludes 27 whose degree was not reported.

APPENDIX TABLE

12
Age of Faculty Transfers
By Degree
(Calendar 1971)

Age	MD&PhD ¹		MD only		PhD only		Master's		Bachelor's or Assoc.		Total
	#	%	#	%	#	%	#	%	#	%	
Below 25	-		1	() ²	-		-		-		1
25-29	-		2	1	11	8	1	14	-		14
30-34	4	9	57	14	39	27	3	43	1	100	104
35-39	9	21	146	35	36	25	1	14	-		192
40-44	11	26	98	24	27	19	-		-		136
45-49	12	28	58	14	25	17	1	14	-		96
50-54	5	12	27	7	5	3	-		-		37
55-59	2	5	18	4	2	1	-		-		22
60-64	-		3	1	-		1	14	-		4
Above 64	-		5	1	1	1	-		-		6
Total	43	(100)	415	(100)	146	(100)	7	(100)	1	(100)	612
Row %	7		68		24		1		()		

(1) Vertical Percentage only

(2) Less than 0.5 percent

(3) Excludes 1 whose degree was not reported.

APPENDIX TABLE

13

Sex of Faculty Transfers
By Degree
(Calendar 1971)

<u>Sex</u>	<u>MD&PhD</u>		<u>MD only</u>		<u>PhD only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%¹</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Male	42	98	388	92	127	87	3	43	1	100	561
Female	1	2	26	6	19	13	4	57	-	-	50
Total	43	(100)	414	(100)	146	(100)	7	(100)	1	(100)	611
Row %	7		68		24		1		() ²		

(1) Vertical Percentage

(2) Less than 0.5 percent

(3) Excludes 1 whose degree was not reported.

APPENDIX TABLE
14
Academic Rank of Faculty
Transfers By Degree
(Calendar 1971)

Rank/Title	MD&PhD		MD Only		PhD Only		Master's		Bachelor's or Assoc.		Total #
	#	% ¹	#	%	#	%	#	%	#	%	
Prof.	27	63	126	31	32	22	-	-	-	-	185
ASC Prof.	7	16	101	25	34	23	1	14			143
AST Prof.	8	19	164	40	66	45	4	57	-	-	242
Inst.	1	2	14	3	11	8	2	29	1	100	29
Lect.	-		6	1	3	2	-		-	-	9
TOTAL	43	(100)	411	(100)	146	(100)	7	(100)	1	(100)	608
ROW %	7		68		24		1			() ²	

- (1) Vertical Percentage
(2) Less Than 0.5 Percent
(3) Excludes 1 whose degree was not reported.

APPENDIX TABLE

15

Nature of Employment of Faculty
Transfers By Degree
(Calendar 1971)

<u>Employment</u>	<u>MD&PhD</u>		<u>MD only</u>		<u>PhD only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%¹</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Strict-Fulltime	31	76	287	71	132	92	5	71	1	100	456
Geograf Fulltime	8	20	85	21	9	6	1	14	-	-	103
Parttime Salaried	2	5	33	8	3	2	1	14	-	-	39
Total	41	(100)	405	(100)	144	(100)	7	(100)	1	(100)	598
Row %	7		68		24		(1)		() ²		

(1) Vertical Percentage

(2) Less than 0.5 percent

(3) Excludes 1 whose degree was not reported.

APPENDIX TABLE

16
Country of Training of Faculty
Transfers By Degree
(Calendar 1971)

<u>Country</u>	<u>MD&PhD</u>		<u>MD only</u>		<u>PhD only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%¹</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
U.S.	26	61	326	79	130	89	7	100	1	100	490
Canadian	1	2	6	1	2	1	-	-	-	-	9
Foreign	16	37	81	20	14	10	-	-	-	-	111
Unknown	-	-	2	1	-	-	-	-	-	-	2
Total	43	(100)	415	(100)	146	(100)	7	(100)	1	(100)	612
Row %	7		68		24		1		1		

(1) Vertical Percentage

(2) Excludes 1 whose degree was not reported.

APPENDIX TABLE

17
Pre doctoral Support Of
Faculty Transfers by Degree
(Calendar, 1971)

<u>Support</u>	<u>MD&PhD</u> ¹		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	%	#	%	#	%	#	%	#	%	
No pre doctoral Support	20	59	348	90	48	34	5	71	1	100	422
Pre doctoral Support	14	41	39	10	92	66	2	29	-	-	147
TOTAL	34	(100)	387	(100)	140	(100)	7	(100)	1	(100)	569
ROW %	6		68		25		1		() ²		

-
- (1) Vertical Percentage Only
 - (2) Less than 0.5%
 - (3) Excludes 1 whose degree was not reported.

APPENDIX TABLE

18
Post doctoral Support Of
Faculty Transfers by Degree
(Calendar, 1971)

<u>Support</u>	<u>MD&PhD¹</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	%	#	%	#	%	#	%	#	%	
No Post Doctoral Sup.	12	30	176	44	66	47	7	100	1	100	262
Post Doctoral Support	28	40	220	56	75	53	-	-	-	-	323
TOTAL	40	(100)	396	(100)	141	(100)	7	(100)	1	(100)	585
ROW %	7		68		74		1		(2		

(1) Vertical percentage only

(2) Excludes 1 whose degree was not reported.

APPENDIX TABLE

19

Institutional Ownership of Faculty
Transfers By Degree
(Calendar 1971)

<u>Ownership</u>	<u>MD&PhD</u>		<u>MD only</u>		<u>PhD only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%¹</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Public	22	51	243	59	102	70	4	57	-		371
Private	21	49	172	41	44	30	3	43	1	(100)	241
Total	43	(100)	415	(100)	146	(100)	7	(100)	1	(100)	612
Row %	7		68		24		1		() ²		

(1) Vertical Percentage

(2) Less than 0.5 percent

(3) Excludes 1 whose degree was not reported.

ACADEMIC TABLE

20
Geographic Region of Schools To
Which Faculty Transferred By Degree
(Calendar 1971)

REGION	MD & PhD		MD Only		PhD Only		Master's		Bachelor's or Assoc.		TOTAL
	#	% ¹	#	%	#	%	#	%	#	%	#
Northeast (35)	14	33	145	35	47	32	3	43	-----		209
South (33)	11	26	120	29	54	37	1	14	1	100	187
Midwest (29)	13	30	89	21	21	14	2	29	-----		125
Farwest (16)	5	12	61	15	24	16	1	14	-----		91
TOTAL	43	(100)	415	(100)	146	(100)	7	(100)	1		612
ROW %	7		68		24		1		() ²		

-
- (1) Vertical Percentage
(2) Less than 0.5 percent
(3) Excludes 1 whose degree was not reported.

APPENDIX TABLE

21

Medical School Department To
Which Faculty Transferred By Degree
(Calendar 1971)

<u>DEPARTMENT</u>	<u>MD & PHD</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's Or Assoc.</u>		<u>TOTAL</u>
	#	% ¹	#	%	#	%	#	%	#	%	#
Basic Sciences	10	23	15	4	95	65	-----	-----	-----	-----	120
Pathology	5	12	40	10	6	4	-----	-----	-----	-----	51
Clinical Sciences	26	61	347	84	39	27	4	57	1	100	417
Other Depts.	<u>2</u>	<u>5</u>	<u>13</u>	<u>3</u>	<u>6</u>	<u>4</u>	<u>3</u>	<u>43</u>	-----	-----	<u>24</u>
TOTAL	43	(100)	415	(100)	146	24	7	(100)	1	(100)	612
ROW %	7		68		24		1		() ²		

(1) Excludes 1 whose degree was not reported.

APPENDIX TABLE

22

Age of Institution To Which
Medical School Faculty Transferred
By Degree
(Calendar 1971)

FIRST MED STUDENT ENROLLMENT	MD & PhD		MD Only		PhD Only		Master's		Bachelor's or Assoc.		TOTAL
	#	% ¹	#	%	#	%	#	%	#	%	#
Before 1946	26	61	279	67	79	54	4	57	1	100	389
1946-1963	5	12	47	11	15	10	2	29	-----		69
1964-present	<u>12</u>	<u>28</u>	<u>89</u>	<u>21</u>	<u>52</u>	<u>36</u>	<u>1</u>	<u>14</u>	-----		<u>154</u>
TOTAL	43	(100)	415	(100)	146	(100)	7	(100)	1	(100)	612
ROW %	7		68		24		1		() ²		

(1) Vertical Percentage

(2) Less than .5 percent

(3) Excludes 1 whose degree was not reported.

APPENDIX TABLE
23
Age of Departed Faculty
Member by Degree
(Calendar 1971)

Age	MD&PhD ¹		MD Only		PhD Only		Master's		Bachelor's or Assoc.		Total
	#	%	#	%	#	%	#	%	#	%	
Below 25	1	1	10	1	7	2	3	2	4	5	25
25-29	-	-	3	(²)	21	5	39	21	13	16	76
30-34	7	6	290	20	88	20	44	24	18	21	447
35-39	33	28	460	31	97	22	23	13	14	17	927
40-44	27	23	280	19	82	18	18	10	7	8	414
45-49	14	12	160	11	55	12	20	11	7	8	256
50-54	12	10	96	7	35	8	14	8	8	10	165
55-59	5	4	50	3	13	3	11	6	3	4	82
60-64	12	10	51	4	15	3	4	2	2	2	84
Above 64	7	6	71	5	33	7	7	4	8	10	126
TOTAL	118	(100)	1471	(100)	446	(100)	183	(100)	84	(100)	2302
ROW %	5		64		19		8		4		

(1) Vertical Percentage Only

(2) Less than 0.5%

(3) Excludes 45 whose degree was not reported.

APPENDIX TABLE

24

Sex of Departed Faculty
Members by Degree
(Calendar, 1971)

<u>Sex</u>	<u>MD & PhD</u> ₁		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Male	114	97	1325	90	367	83	58	32	46	55	1910
Female	3	3	141	10	76	17	124	68	37	45	381
TOTAL	117	(100)	1466	(100)	443	(100)	182	(100)	83	(100)	2291
ROW %	5		64		19		8		4		

(1) Vertical Percentage

(2) Excludes 40 whose degree was not reported.

APPENDIX TABLE

25

Academic Rank of Departed Faculty
Members by Degree
(Calendar 1971)

Rank	MD&PhD		MD Only		PhD Only		Master's		Bachelor's or Assoc.		Total #
	#	% ¹	#	%	#	%	#	%	#	%	
Full Prof.	27	23	183	13	75	17	6	3	2	3	293
Assoc. Prof.	28	24	212	15	74	17	4	2	4	5	222
Asst. Prof.	35	30	531	36	167	38	34	19	16	20	667
Instr.	18	15	475	33	70	16	104	57	40	49	707
Lecturer	10	9	60	4	58	13	35	19	19	24	182
TOTAL	118	(100)	1461	(100)	444	(100)	183	(100)	84	(100)	2287
ROW %	5		63		19		8		4		

- (1) Vertical percentage only
- (2) Less than 0.5%
- (3) Excludes 42 whose degree was not reported.

APPENDIX TABLE

26

Nature of Employment of Departed
Faculty by Degree
(Calendar 1971)

<u>Employment</u>	<u>MD&PhD¹</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	%	#	%	#	%	#	%	#	%	
Strict Full- Time	70	80	727	61	286	77	137	81	56	79	1276
Geographic Full-Time	8	10	242	20	45	12	15	9	6	9	316
Part-Time Salaried	10	11	233	19	43	12	18	11	9	13	313
TOTAL	88	(100)	1202	(100)	374	(100)	170	(100)	71	(100)	1905 (100)
ROW%	5		62		19		9		4		

(1) Vertical Percentage only

(2) Excludes 21 whose degree was not reported.

APPENDIX TABLE

27

Country of Training of Departed
Faculty by Degree
(Calendar 1971)

<u>Country</u>	<u>MD&PhD</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Masters</u>		<u>Bachelors or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%¹</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
U.S.	63	53	1098	75	383	86	174	95	72	86	1790
Canadian	2	2	36	2	9	2	-	-	4	5	51
Foreign	51	43	328	22	47	11	2	1	4	5	432
Unknown	2	2	11	1	8	2	7	4	4	5	32
Total	118	(100)	1473	(100)	447	(100)	183	(100)	84	(100)	2305
Row %	5		63		19		8		4		

(1) Vertical percentage only

(2) Excludes 68 whose degree was not reported.

APPENDIX TABLE

28

Pre doctoral Support Of
Deported Faculty by Degree
(Calendar 1971)

<u>Support</u>	<u>MD&PhD</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	% ¹	#	%	#	%	#	%	#	%	
No pre doctoral Support	40	62	711	88	101	31	100	81	43	81	995
Pre doctoral Support	25	39	102	13	222	69	23	19	10	19	382
TOTAL	65	(100)	813	(100)	323	(100)	123	(100)	53	(100)	1377
ROW %	5		59		23		9		4		

(1) Vertical Percentage Only

(2) Excludes 16 whose degree was not reported.

APPENDIX TABLE

29

Post doctoral Support Of
Departed Faculty by Degree
(Calendar, 1971)

Support	MD&PhD ₁		MD Only		PhD Only		Master's		Bachelors or Assoc.		Total
	#	%	#	%	#	%	#	%	#	%	
No Post doc- toral Support	32	35	534	51	124	44	120	100	51	100	861
Post doctoral Support	59	65	524	49	158	56	-	-	-	-	741
TOTAL	91	(100)	1058	(100)	282	(100)	120	(100)	51	(100)	1602
ROW %	6		65		17		7		3		

(1) Vertical Percentage only

(2) Excludes 16 whose degree was not reported.

APPENDIX TABLE

30
 Institutional Ownership of Departed
 Faculty by Degree
 (Calendar 1971)

<u>Ownership</u>	<u>MD&PhD₁</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Masters</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Public	57	48	704	48	224	50	101	55	49	58	1135
Private	61	52	769	52	223	50	82	45	35	42	1170
Total	118	(100)	1473	(100)	447	(100)	183	(100)	84	(100)	2305
Row %	5		63		19		8		4		

(1) Vertical percentage only

(2) Excludes 45 whose degree was not reported.

APPENDIX TABLE

31
 Geographic Region of Departed
 Faculty Members By Degree
 (Calendar, 1971)

<u>Region</u> (Schools)	<u>MD&PhD</u> ¹		<u>MD Only</u>		<u>PhD Only</u>		<u>Masters</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	#	%	#	%	#	%	#	%	#	%	
Notheast (35)	56	48	518	42	172	39	67	37	28	33	941
South (33)	25	21	377	26	126	28	51	28	15	18	594
Midwest (29)	25	21	285	19	88	20	40	22	27	32	465
Farwest (16)	12	10	193	13	61	14	25	14	14	17	305
TOTAL	118	(100)	1473	(100)	447	(100)	183	(100)	84	(100)	2305
ROW %	5		63		19		8		4		

(1) Vertical Percentage

(2) Excludes 45 whose degree was not reported.

APPENDIX TABLE

32

Department of Departed
Faculty Members By Degree
(Calendar 1971)

<u>Department</u>	<u>MD&PhD₁</u>		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>
	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	<u>#</u>	<u>%</u>	
Basic Science	25	21	50	3	204	46	10	5	10	12	299
Pathology	11	9	109	7	16	4	3	2	3	4	142
Clinical Sciences	77	65	1291	88	205	46	130	71	44	52	1747
Other Depts.	5	4	23	2	22	5	40	22	27	32	117
TOTAL	118	(100)	1473	(100)	447	(100)	183	(100)	84	(100)	2305
ROW %	5		63		19		8		4		

(1) Vertical Percentage

(2) Excludes 45 whose degree was not reported.

APPENDIX TABLE

33

Departed Medical School
Faculty By Age of Institution
and Degree
(Calendar 1971)

<u>FIRST MED SCHOOL ENROLLMENT</u>	<u>MD&PhD</u> ¹		<u>MD Only</u>		<u>PhD Only</u>		<u>Master's</u>		<u>Bachelor's or Assoc.</u>		<u>Total</u>	
	#	%	#	%	#	%	#	%	#	%		
Before 1946	91	77	1205	82	380	85	148	81	77	92	1901	
1946-1963	17	14	188	13	34	8	24	13	2	2	265	
1964 - Present	10	9	80	5	33	7	11	6	5	6	139	
TOTAL	118	(100)	1473	(100)	447	(100)	183	(100)	84	(100)	2305	(100)
ROW %	5		63		19							

(1) Vertical Percentage

(2) Excludes 45 whose degree was not reported.