

DOCUMENT RESUME

ED 121 184

HE 007 622

AUTHOR Anderson, Philip
 TITLE Descriptive Study of Salaried Medical School Faculty.
 INSTITUTION Association of American Medical Colleges, Washington, D. C.
 SPONS AGENCY Health Resources Administration (DHEW/PHS), Bethesda, Md. Bureau of Health Manpower.
 PUB DATE Dec 75
 NOTE 99p.; Some tables may not reproduce clearly due to type size; Prepared by Division of Operational Studies
 AVAILABLE FROM Association of American Medical Colleges, Division of Operational Studies, One Dupont Circle, N.W., Washington, D.C. 20036

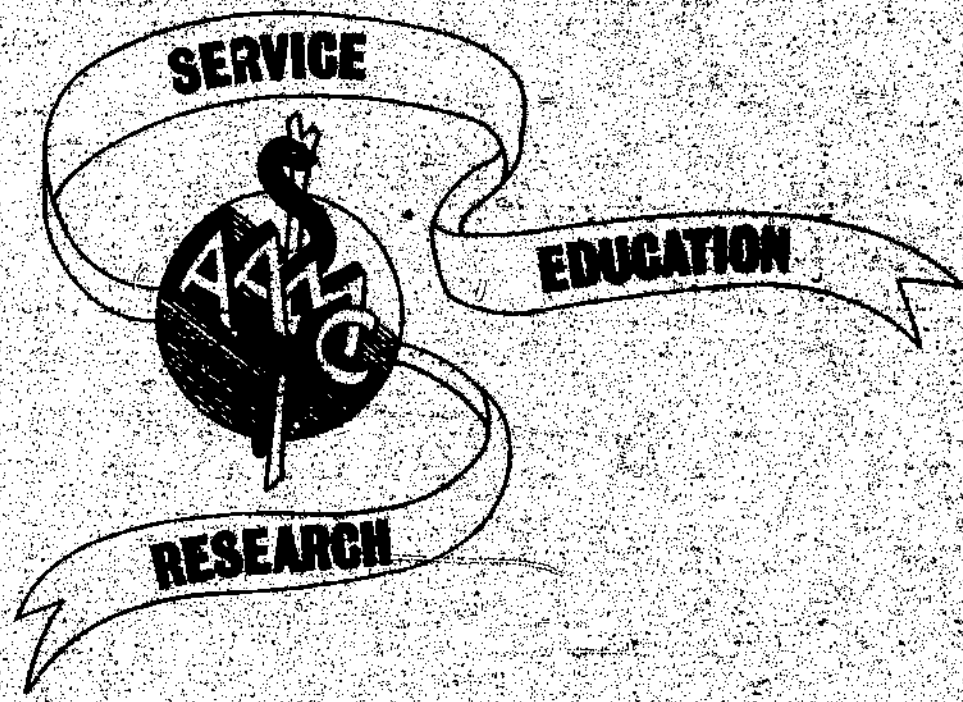
EDRS PRICE MF-\$0.83 HC-\$4.67 Plus Postage
 DESCRIPTORS Demography; Faculty Integration; Foreign Nationals; Health Occupations; *Higher Education; Medical Education; *Medical Schools; Minority Group Teachers; National Surveys; *Physicians; Questionnaires; School Surveys; Statistical Data; Tables (Data); *Teacher Background; *Teacher Characteristics; Women Teachers
 IDENTIFIERS *Salaried Medical Faculty Questionnaire

ABSTRACT

Tabular and descriptive data are offered on the salaried medical school faculty, including information on their academic status, demographic characteristics, and educational background. The study includes not only an analysis of current faculty composition and characteristics and institutional differences in faculty, but also an analysis of the changes in these parameters from 1970-71. The major instrument used was the Salaried Medical Faculty Questionnaire, essentially biographical in nature and consisting of 298 elements. In the 1973-74 school year, there were an estimated 26,582 salaried faculty members employed at the 77 U.S. medical schools selected for the study. Data are reported for: primary speciality in the clinical sciences; full time teachers; participation in NIH training grants; completion of internships and residencies; private practice experience; female representation on faculty; minority group representation; foreign trained personnel representation; and percentages of newly hired faculty. (LBH)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

DESCRIPTIVE STUDY OF SALARIED
MEDICAL SCHOOL FACULTY



PREPARED BY:

PHILIP ANDERSON
STAFF ASSOCIATE

ASSOCIATION OF AMERICAN MEDICAL COLLEGES
DIVISION OF OPERATIONAL STUDIES
ONE DUPONT CIRCLE, N.W.
WASHINGTON, D.C. 20036

DECEMBER 1975

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

HE 007 622

DESCRIPTIVE STUDY OF SALARIED
MEDICAL SCHOOL FACULTY

The work upon which this publication is based was supported in part by the Bureau of Health Manpower, Department of Health, Education and Welfare pursuant to contract number 231-75-0007. However, any conclusions and/or recommendations expressed herein do not necessarily represent the views of the supporting agency.

TABLE OF CONTENTS

	Page
<u>Introduction</u>	1
The Data Base	
Selection of Schools	
Highlights	
<u>Overview</u>	7
Degree and Rank	
Primary Specialties	
Major Departments	
<u>Current Appointment Characteristics</u>	15
Nature of Employment	
Academic Responsibilities	
Participation in Federal Programs	
<u>Educational Characteristics</u>	31
Internships	
Residencies	
Board Certifications	
Pre-Doctoral Support	
Post-Doctoral Support	
<u>Employment History</u>	48
Number of Jobs	
Length of Current Employment	
Original Source	
Previous Employment	
<u>Special Topics</u>	56
Faculty Characteristics by Sex	
Minority Faculty Members	
Foreign Graduates on U.S. Medical School Faculties	
Newly Hired Faculty	
<u>Footnotes</u>	82
<u>Appendices</u>	
A. Faculty Roster Questionnaire	
B. Medical Schools Included in Study	

LIST OF TABLES

<u>TABLE</u>	<u>Page</u>
1 Rank and Degree Distribution of Medical School Faculty, 1970-71 & 1973-74	9
2 Distribution of Medical School Faculty By Primary Specialty and Type of Degree, 1970-71 & 1973-74	11
3 Distribution of Primary Specialties of Medical School Faculty by Type of Degree, 1973-74	12
4 Distribution of Medical School Faculty By Major Academic Departments, 1970-71 & 1973-74	14
5 Distribution of Medical School Faculty By Rank and Nature of Employment, 1970-71 & 1973-74	16
6 Rank and Degree of Medical School Faculty by Nature of Employment, 1973-74	17
7 Mean Number of Responsibilities of Medical School Faculty by Rank and Type of Degree, 1970-71 & 1973-74	19
8 Area of Responsibilities of Medical School Faculty by Type of Degree, 1973-74	21
9 Distribution of Teaching and Research Responsibilities of Medical School Faculty, 1970-71 & 1973-74	22
10 Distribution of Medical School Faculty by Current Participation in NIH Training Grants by Degree Type, 1970-71 & 1973-74	24
11 Distribution of Medical School Faculty by Current Participation in Federal Programs by Degree Type, 1970-71 & 1973-74	25
12 Distribution of Medical School Faculty Participating in Total Federal Programs by Major Academic Departments, 1973-74	27
13 Distribution of Medical Faculty Participants in NIH Training Programs By Grant Specialty, 1973-74	28
14 Distribution of Faculty Participation Rates by Agency Program and Degree Type, 1973-74	30
15 Distribution of M.D. Medical School Faculty by Rank and Number of Internships, 1970-71 & 1973-74	33
16 Distribution of M.D. Medical School Faculty by Rank and Number of Residencies, 1970-71 & 1973-74	35

LIST OF TABLES (CONT.)

	Page
17 Distribution of Residency Specialties of M.D. Medical School Faculty, 1973-74	36
18 Distribution of M.D. Medical School Faculty by Rank and Number of Board Certifications, 1970-71 & 1973-74	37
19 Distribution of Board Certifications Awarded to M.D. Medical School Faculty, 1973-74	39
20 Distribution of Doctoral Medical Faculty by Number of Pre-Doctoral Awards, 1970-71 & 1973-74	40
21 Source of Pre-Doctoral Awards by Doctoral Degree Type of Medical School Faculty, 1973-74	41
22 Distribution of Doctoral Medical Faculty by Number of Post-Doctoral Awards, 1970-71 & 1973-74	43
23 Source of Post-Doctoral Awards by Degree Type of Medical School Faculty, 1973-74	44
24 Pre- And Post-Doctoral Support of Medical School Faculty by Primary Specialty, 1973-74	45
25 Pre- And Post-Doctoral Support of Medical School Faculty by Department, 1973-74	47
26 Total Number of Jobs of Medical School Faculty by Type of Degree, 1970-71 & 1973-74	49
27 Length of Current Employment of Medical School Faculty by Rank and Type of Degree, 1970-71 & 1973-74	50
28 Original Employment Source of Medical School Faculty by Type of Degree, 1973-74	52
29a Sex of Medical School Faculty by Type of Degree, 1970-71 & 1973-74	57
29b Rank and Degree Distribution of Medical School Faculty by Sex, 1970-71 & 1973-74	58
29c Demographic and Appointment Characteristics of Medical School Faculty by Sex and Type of Degree, 1973-74	60
30a Race, Ethnic Origin of Medical School Faculty With U.S. Citizenship by Type of Degree, 1970-71 & 1973-74	63

LIST OF TABLES (CONT.)

	Page
30b Rank and Degree Distribution of Medical School Faculty With U.S. Citizenship by Ethnic Group, 1973-74	65
30c Demographic and Appointment Characteristics of Medical School Faculty With U.S. Citizenship by Ethnic Group, 1973-74	66
31a Country of Training of Medical School Faculty by Type of Degree, 1970-71 & 1973-74	69
31b Rank and Degree Distribution of Medical School Faculty by Country of Training, 1973-74	70
31c Demographic and Appointment Characteristics of U.S. & Foreign Medical Graduate Faculty, 1973-74	72
32a Newly Hired Medical School Faculty By Type of Degree, 1970-71 & 1973-74	76
32b Demographic and Appointment Characteristics of Newly Hired Medical School Faculty by Type of Degree, 1970-71 & 1973-74	77

LIST OF FIGURES

FIGURE	Page
1 Distribution of Medical School Faculty by Highest Academic Degree, 1970-71 & 1973-74	8
2 Faculty Participation Levels in Federally Sponsored Programs by Supporting Agencies, 1973-74	29
3 U.S. Medical School Faculty Degrees Awarded by Decade, 1973-74	32
4 Previous Employment Location of Medical School Faculty by Type of Degree, 1973-74	53
5 M.D. Faculty With Private Practice Experience by Specialty, 1973-74	55
6 Distribution by Nation Awarding M.D. Degree of Foreign-Educated M.D.'s on Faculty of U.S. Medical Schools, 1970-71 & 1973-74	74

INTRODUCTION

The unique and specialized activities of a faculty comprise the largest single resource of services available to an academic health center. Comparatively little is known, however, of the employment profile of this highly trained and specialized resource. The purpose of this study is to summarize the employment profile of U.S. medical school faculty and to indicate how their characteristics may have been modified within the medical education system in the past few years.

Health planning agencies such as the Bureau of Health Manpower (BHM), a component of the Health Resources Administration (HRA), and the Association of American Medical Colleges (AAMC) are primarily concerned with quantitative and qualitative data on health manpower at medical schools across the United States. The present study addresses the need of both BHM and AAMC for available, up-to-date statistical information on employment characteristics of salaried faculty at U.S. medical schools as well as on the changes in the current medical faculty force since 1970-71. The specific research requirements proposed by BHM read as follows:

...An objective and comprehensive descriptive study of salaried medical school faculty, including information on their academic status, demographic characteristics, and educational background. The study shall include not only an analysis of current faculty composition and characteristics and institutional differences in faculty

composition and characteristics and institutional differences in faculty characteristics, but also an analysis of the changes in these parameters from 1970-71. [Health Resources Administration Contract #231-75-007, p.4].

Up-to-date statistical information is needed on faculty manpower if the development of new knowledge is to proceed at a reasonable pace. One would hope that this faculty manpower study may be beneficial to BHM and its associated organizations, and to the faculty on staff at the participating medical schools.

The Data Base

The major instrument used in the data collection for the present study is the "Salaried Medical Faculty Questionnaire". Data from this questionnaire are processed and maintained in the Faculty Roster Master File, a computerized file maintained at the AAMC. The questionnaire, reproduced in Appendix A of this report, indicates the kinds of data available on each faculty member. The questionnaire is essentially biographical in nature consisting of 298 data elements.

The master file consists of all salaried faculty regardless of source of income. Visiting faculty are included only when they hold academic rank and a medical school faculty appointment for six months or longer.

There are three criteria for inclusion of an individual in the Master File; he/she must:

1. hold a faculty appointment in the medical school.
2. perform an academic function full-time or part-time within the medical school, based upon the necessity for continuance of that given academic function by one or more faculty members upon loss of the incumbent; and
3. hold an employment agreement for regular reimbursement with (1) the medical school, (2) its parent institution, or (3) one of the medical school's affiliated institutions.

This Master File is regularly up-dated by reports from each medical school that indicate new hires, promotions and other changes in appointment status, including academic leave and employment terminations. If a faculty member transfers to another medical school, the record is transferred in the file. The Faculty Roster Master File also retains records on faculty who were formerly, but are not at present, employed at medical schools.

Selection of Schools

The primary concern in selecting institutions for study in any national research effort is the integrity of the data available on these institutions. Since the present study is concerned with faculty characteristics over two points in time,

it is important to select data from schools having a high integrity of reporting over the relevant time period.

Though almost all the medical schools have reliable and up-to-date information on their current faculty in the profile system to the extent that would be expected for any such national project, a number of these schools have been poor reporters in the past. According to AAMC statistical records on the updating history of the data for medical schools contained in the Faculty Roster, a number of schools have provided limited information for one or both of the time periods covered in the present study. Typical missing update data include changes in rank, nature of employment and responsibilities, additional education, and participation in Federal programs. Because of missing data, only schools that had more than 30 percent of their data updated for 1970-71 and 1973-74 were included in this study. Seventy-seven of the 116 medical schools satisfied this criterion and are included in the present study (See Appendix B).

Highlights

The Major Findings may be summarized as follows:

- (1) There was an estimated 26,582 salaried faculty at 77 U.S. Medical Schools in the 1973-74 Academic Year.
- (2) Overall, 75 percent of the 1973-74 faculty had been employed at a medical school since 1971.

- (3) Almost six out of every ten faculty in 1973-74 had a primary specialty in the clinical sciences.
- (4) In 1973-74, 71 percent of the faculty were employed as strict full-time, 17 percent as geographic full-time, and 12 percent as part-time.
- (5) The mean number of responsibilities provided by the faculty to the academic and health programs of the medical school was 2.44. Over 90 percent of the M.D.'s are involved in teaching activities.
- (6) Twenty three percent of the 1973-74 faculty were participating in at least one NIH training grant, which was a reduction in the participation level found in 1970-71 (29 percent).
- (7) Thirteen percent of the M.D.'s have not completed an internship and another ten percent have not completed a residency.
- (8) Forty-four percent of the faculty have had only their current job.
- (9) Among the faculty who have had more than their current job, 64 percent of the faculty in family medicine departments have had private practice experience.
- (10) Women represented 15 percent of the total faculty in 1973-74, a percentage similar to their representation in 1970-71.
- (11) Non-caucasians represent only six percent of the faculty (U.S. citizens) in 1973-74, a percentage similar to 1970-71.

- (12) The percentage representation of foreign trained persons on the faculty is similar for 1970-71 and 1973-74. Canadian trained and foreign trained faculty represent 1.7 percent and 14 percent, respectively.
- (13) Newly hired faculty accounted for 11 percent of the total faculty force in 1973-74, a percentage quite similar to 1970-71.

OVERVIEW

The overall report, including this overview, will focus primarily on the current (1973-74) faculty profile¹ at U.S. medical schools and use the 1970-71 profile² to contrast differences in faculty characteristics between the two time periods.

In the 1973-74 school year, there were an estimated 26,582 salaried faculty members employed at the 77 U.S. medical schools selected for inclusion in this study. The mean (average) number of faculty members per school is 345 with a range in size from 28 to 1005 faculty members. The total faculty count for these same schools in 1970-71 was 22,650.

Degree and Rank

Figure 1 presents the percentage of faculty by highest earned degrees held in 1973-74 and 1970-71. There is essentially no change in degree types between the time periods. This might be expected because a large percentage of the 1973-74 faculty of each degree type had been on faculty at a medical school since 1971. Overall, 75 percent of the 1973-74 faculty had been employed at a medical school since 1971.

Generally, if we look at degree types by rank in Table 1, full professors are more likely to have M.D.-Ph.D.'s than the other ranks. Assistant professors hold the highest percentage of M.D.'s and persons with third level degrees (Ph.D., Sc.D., or Ed.D., but not M.D.), hereinafter abbreviated as Ph.D., and most of those with the master's degree or less are instructors. Again

FIGURE 1

Distribution of Medical School Faculty
By Highest Academic Degree
1970-71 & 1973-74



16

TABLE 1

**Rank and Degree Distribution
Of Medical School Faculty
1970-71 & 1973-74**

	<u>1973-74</u>		<u>1970-71</u>	
	#	%	#	%
<u>FULL PROFESSOR</u>				
MD - PhD	641	2	557	3
MD	4403	17	3574	16
PhD	1846	7	1501	7
Non-Doctoral	74	0.3	62	0.3
<u>ASSOCIATE PROFESSOR</u>				
MD - PhD	364	1.4	335	1.5
MD	3776	14	3214	14
PhD	1833	7	1506	7
Non-Doctoral	156	0.6	151	0.7
<u>ASSISTANT PROFESSOR</u>				
MD - PhD	294	1.1	292	1.3
MD	5551	21	4622	21
PhD	2659	10	2229	10
Non-Doctoral	637	2	525	2
<u>INSTRUCTOR</u>				
MD - PhD	45	0.2	41	0.2
MD	1688	6	1560	7
PhD	436	1.6	344	1.5
Non-Doctoral	1119	4	983	4
<u>LECTURER & OTHER</u>				
MD - PhD	15	0.1	13	0.1
MD	295	1.1	287	1.3
PhD	267	1.0	258	1.1
Non-Doctoral	404	1.5	352	1.6
TOTAL	26505¹	(100%)	22528²	(100%)

¹ Excludes 79 (0.3 Percent) Faculty Whose Rank or Type of Degree is Unknown.

² Excludes 122 (0.5 Percent) Faculty Whose Rank or Type of Degree is Unknown.

there appears to be no major difference in the distribution of rank by degree between the two points in time.

Primary Specialties

Tables 2 and 3 show a distribution of faculty by their primary specialties. Approximately six out of every ten faculty in 1973-74 had a primary speciality in the Clinical Sciences. As would be expected, 90 percent of the M.D.'s had a primary specialty in the Clinical Sciences, but for M.D.-Ph.D.'s this percentage drops to 62 percent. The only shift in this distribution between the time periods reveals a slight reduction of the 1973-74 M.D.-Ph.D.'s with Basic Science specialties and a slight increase of M.D.-Ph.D.'s with Clinical Science specialties. Table 2 also indicates a shift in primary specialties for non-doctoral faculty. Though non-doctoral faculty tend to have primary specialties within Allied Health disciplines for both years there were increases of non-doctoral with Clinical Science specialties from 1970-71 to 1973-74.

Table 3 gives a further breakdown for degree type by primary specialty. It is interesting to note in Table 3 that 58 percent of faculty with the master's degree hold specialties in either Sociology or Allied Health. The greater number of M.D.-Ph.D. faculty are in surgical specialties; whereas, most M.D.'s are found in internal medicine specialties with surgical specialties a close second. The modal number of Ph.D.'s claim Biochemistry

TABLE 2

Distribution of Medical School Faculty
By Primary Specialty and Type of Degree
1970-71 & 1973-74

GROUPED PRIMARY SPECIALTY	TOTAL			MD-PhD			MD			PhD			Non-Doctoral		
	1973-1974		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	%	%	#	%	%	#	%	%	#	%	%	#	%	%
Basic Science	6686	26	26	489	36	39	1485	10	11	4488	65	65	224	10	10
Clinical Science	15797	61	59	835	62	59	13940	90	89	654	9	9	368	16	13
Physical Science	540	3	2	8	0.6	0.7	19	0.0	0.1	349	5	5	164	7	8
Behavioral Science	1445	6	6	5	0.4	0.4	13	0.0	0.1	934	13	14	493	22	22
Allied Health	1170	4	5	4	0.3	0.3	6	0.0	0.1	350	5	5	810	36	39
Administration	240	0.9	1.0	5	0.4	0.5	47	0.3	0.3	52	0.1	0.7	136	6	7
Other	194	0.7	0.6	1	0.1	0.0	7	0.0	0.0	107	1.5	1.3	79	4	3
TOTAL	26072 ¹ (100%) (100%)			1347 (100%) (100%)			15517 (100%) (100%)			6934 (100%) (100%)			2274 (100%) (100%)		

¹Excludes 510 (1.9 percent) Faculty Whose Primary Specialty Is Unknown.

TABLE 3

Distribution of Primary Specialties of
Medical School Faculty by Type of Degree
1973-74

PRIMARY SPECIALTY	TOTAL ¹		MD-PhD		MD		PhD		MASTERS		BCH/ASC	
	#	%	#	%	#	%	#	%	#	%	#	%
<u>Basic Science</u>												
Anatomy	844	3	62	5	92	0.6	671	10	13	0.8	6	1.1
Biochemistry	1678	6	77	6	90	0.6	1462	21	34	2	15	3
Biology, All	76	0.3	1	0.1	14	0.1	55	0.8	2	0.1	4	0.7
BioPhysics	127	0.5	7	0.5	6	0.0	112	1.6	2	0.1	0	0.0
Genetics	220	0.8	16	1.2	41	0.3	158	2	5	0.1	0	0.0
Immunology	171	0.7	9	0.7	34	0.2	119	1.7	7	0.4	2	0.4
Micro-Parasitology	698	3	29	2	75	0.5	542	8	38	2	14	3
Pathology - BSC	1070	4	118	9	831	5	102	1.5	9	0.6	10	1.8
Pharmacology	720	3	62	6	132	0.9	497	7	3	0.2	6	1.1
Physiology	982	4	85	6	165	1.1	712	10	11	0.7	9	1.6
Zoology	43	0.2	0	0.0	2	0.0	37	0.5	4	0.3	0	0.0
All Other	43	0.2	3	0.2	4	0.0	22	0.3	13	0.8	1	0.2
<u>Clinical Science</u>												
Anesthesiology	775	3	43	3	722	5	3	0.0	4	0.3	3	0.5
Dermatology	211	0.8	9	0.7	199	1.3	3	0.0	0	0.0	0	0.0
Endocrinology	234	0.9	11	0.8	129	0.8	91	1.3	1	0.1	2	0.4
Family Practice	207	0.8	4	0.3	196	1.3	0	0.0	6	0.4	1	0.2
Internal Medicine	2877	11	139	10	2694	17	31	0.5	2	0.1	11	2
General Medicine	1158	4	68	5	1075	7	11	0.2	1	0.1	3	0.5
Nuclear Medicine	159	0.6	15	1.1	71	0.5	57	0.8	9	0.6	7	1.3
Neurology	493	2	33	2	447	3	11	0.2	1	0.1	1	0.2
Ob & Gyn	822	3	44	3	753	5	15	0.2	7	0.4	3	0.5
Oncology	58	0.2	7	0.5	36	0.2	14	0.2	0	0.0	1	0.2
Pathology-Clin	514	2	35	3	379	2	65	0.9	16	1.0	19	3
Pediatrics	1858	7	67	5	1749	11	26	0.4	14	0.9	2	0.4
PM & R	238	0.9	9	0.7	202	1.3	0	0.1	16	1.0	2	0.4
Pub Hlth & Prev	351	1.4	28	2	162	1.0	80	1.2	70	4	11	2
Psychiatry	1853	7	64	5	1706	11	50	0.7	25	1.6	8	1.4
Radiology	1158	4	42	3	963	6	97	1.4	43	3	13	2
Surgery	2746	11	206	15	2452	16	72	1.0	7	0.4	9	1.6
All Other	63	0.3	12	0.9	24	0.2	21	0.3	6	0.4	0	0.0
<u>Physical Science</u>	530	2	8	0.6	19	0.1	349	5	91	6	63	11
<u>Behavioral Science</u>												
Psychology	904	3	3	0.2	11	0.1	815	12	62	4	13	2
Sociology	504	2	1	0.1	1	0.0	161	1.5	393	25	8	1.4
Other	29	0.1	1	0.1	1	0.0	19	0.3	6	0.4	2	0.4
<u>Allied Health</u>	1120	4	4	0.3	6	0.0	350	5	521	33	239	43
<u>Administration</u>	231	0.9	5	0.4	47	0.3	52	0.8	94	6	31	6
<u>Other</u>	192	0.7	1	0.1	7	0.0	107	1.5	53	3	24	4
TOTAL	26000	(100%)	1347	(100%)	15517	(100%)	6034	(100%)	1000	(100%)	345	(100%)

Excludes 484 (2 Percent) faculty whose primary specialty or degree is unknown.

as their primary specialty (21 percent).

Major Departments

The distribution of faculty by their major department of affiliation is presented in Table 4. The Department of Medicine records the greater percentage of faculty (17 percent) across all major departments for both points in time. Again, there is little difference over time in the distribution of faculty across major academic departments with one exception, faculty in Family Practice departments have doubled since 1970-71.

TABLE 4

Distribution of Medical School Faculty
By Major Academic Departments
1970-71 & 1973-74

DEPARTMENTS	1973-74		1970-71
	#	%	%
Anatomy	917	3	4
Biochemistry	1004	4	4
Biophysics	127	0.5	0.5
Genetics	83	0.3	0.3
Microbiology	770	3	3
Pathology	1772	7	7
Pharmacology	693	3	3
Physiology	942	4	4
Riometry	92	0.3	0.3
Anesthesiology	787	3	3
Dermatology	169	0.6	0.6
Molecular Biology	129	0.5	0.4
Medicine	4408	17	16
Neurology	535	2	2
Ob-Gyn	930	4	4
Ophthalmology	434	1.6	1.8
Orthopedics	215	0.8	0.6
Otolaryngology	257	1.0	1.0
Pediatrics	2212	8	8
Phys Med & Rehab	404	1.5	1.7
Psychiatry	3033	11	12
Pub Hlth & Prev Med	783	3	3
Radiology	1499	6	5
Surgery	2344	9	9
Family Practice	352	1.3	0.5
Other	1660	6	6
TOTAL	26551 ¹	(100%)	(100%)

¹ Excludes 31 (0.1 Percent) Faculty Whose Academic Department of Affiliation is Unknown.

CURRENT APPOINTMENT CHARACTERISTICS

This chapter focuses on the nature and type of academic function performed by medical school faculty. Such activities include the nature of employment, number and areas of responsibility and the extent of participation in federally sponsored programs contracted under the auspices of the medical school.

Nature of Employment

The employment categories of faculty reported in this section are 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 basic salary (all or most of which is paid from funds controlled by the medical school), and may earn income from professional activities conducted in the institution(s) paying their basic salary; part-time faculty receive regular payments for part-time professional activity from funds controlled by the medical schools.

In 1973-74, 71 percent of the total faculty were employed as strict full-time, 17 percent as geographic full-time, and 12 percent as part-time (Table 5). Looking at the nature of appointment by academic rank, one can observe in Table 5 that full professors have the highest percentage of faculty with geographic

TABLE 5

Distribution of Medical School Faculty
By Rank and Nature of Employment
1970-71 & 1973-74

RANK	STRICT FULL-TIME			GEOGRAPHIC FULL-TIME			PART-TIME		
	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	% ²	% ²	#	% ²	% ²	#	% ²	% ²
Full Professor	5046	73	73	1376	20	21	513	7	6
Associate Professor	4351	71	71	1084	18	19	651	11	10
Assistant Professor	6342	70	70	1403	15	17	1330	15	13
Instructor	2245	69	67	406	13	15	594	18	18
Lecturer and Other	704	77	72	41	4	10	173	19	18
TOTAL ¹	18688	71	71	4345	17	18	3261	12	11

¹Excludes 288 Faculty (1 Percent) Whose Nature of Employment is Unknown.

²Percentage Within Rank.

appointments (20%), a percentage that drops off steadily with a decrease in rank. However, the reverse is true with part-time faculty positions. The higher the rank, the lower the percentage of part-time appointments. A comparison of these percentages with those of 1970-71 show that the nature of employment for each rank has remained relatively stable.

Table 6 presents a further breakdown by degree and rank by nature of employment. This Table reveals that the professional activities of faculty with geographic appointments are primarily physician oriented. Though non-M.D. faculty represent almost 37 percent of the total faculty, they represent less than 18 percent of faculty with geographic appointments across ranks. With exception of lecturers, M.D.-Ph.D. faculty consistently represent lower percentages across ranks in geographic positions than do faculty with only the M.D. degree.

Academic Responsibilities

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

Table 7 presents the mean number of responsibilities provided by the faculty to the academic and health programs of the medical school. The overall mean of the total faculty is 2.44 activities. As expected the number of responsibilities increases

TABLE 6

**Rank and Degree of Medical
School Faculty by Nature of Employment
1973-74**

FULL PROFESSORS	STRICT FULL-TIME			GEOGRAPHIC FULL-TIME			PART-TIME		
	#	% ²	% ^{3&4}	#	% ²	% ^{3&4}	#	% ²	% ^{3&4}
MD - FhD	502	79	(10)	107	17	(8)	28	4	(5)
MD	2885	66	(57)	1083	25	(79)	409	9	(79)
FhD	1598	87	(32)	173	9	(13)	70	4	(14)
Non-Doctoral	61	86	<u>(1.2)</u> (100%)	4	6	<u>(0.3)</u> (100%)	6	8	<u>(1.2)</u> (100%)
ASSOCIATE PROFESSORS									
MD - PhD	288	80	(7)	53	15	(5)	19	5	(3)
MD	2345	63	(54)	867	23	(80)	539	14	(83)
PhD	1585	87	(36)	152	8	(14)	84	5	(13)
Non-Doctoral	133	86	<u>(3)</u> (100%)	12	8	<u>(1.1)</u> (100%)	9	6	<u>(1.4)</u> (100%)
ASSISTANT PROFESSORS									
MD - PhD	233	80	(4)	36	12	(3)	21	7	(1.6)
MD	3342	61	(53)	1114	20	(79)	1058	19	(80)
PhD	2248	85	(35)	195	7	(14)	199	8	(15)
Non-Doctoral	519	83	<u>(8)</u> (100%)	58	9	<u>(4)</u> (100%)	52	8	<u>(4)</u> (100%)
INSTRUCTORS									
MD - PhD	30	67	(1.3)	6	13	(1.2)	9	20	(1.5)
MD	977	59	(44)	272	16	(67)	411	25	(69)
PhD	331	77	(15)	44	10	(11)	57	13	(10)
Non-Doctoral	907	82	<u>(40)</u> (100%)	84	8	<u>(21)</u> (100%)	117	11	<u>(20)</u> (100%)
LECTURERS & OTHER									
MD - PhD	8	57	(1.1)	2	14	(34)	4	29	(2)
MD	154	53	(22)	38	13	(32)	97	34	(56)
PhD	214	83	(30)	17	7	(17)	28	11	(16)
Non-Doctoral	328	82	<u>(47)</u> (100%)	28	7	<u>(17)</u> (100%)	44	11	<u>(25)</u> (100%)
TOTAL¹	18688			4345			3261		

¹Excludes 288 (1 percent) faculty whose nature of employment is unknown.

²Percentage within each rank and degree type.

³Percentage within each rank and type of employment.

⁴Percents may not add up to 100% due to rounding.

TABLE 7

Mean Number of Responsibilities
Of Medical School Faculty
By Rank and Type of Degree
1970-71 & 1973-74

	1970-71		1973-74	
	MEAN	S.D.	MEAN	S.D.
<u>FULL PROFESSOR</u>				
MD & PhD	2.84	0.96	2.81	0.99
MD	2.98	1.00	2.98	1.01
PhD	2.37	0.79	2.40	0.79
Non-Doctoral	2.01	0.99	2.00	0.96
<u>ASSOCIATE PROFESSOR</u>				
MD & PhD	2.61	0.95	2.52	0.88
MD	2.73	0.94	2.76	0.95
PhD	2.17	0.69	2.21	0.73
Non-Doctoral	2.15	1.02	2.00	0.98
<u>ASSISTANT PROFESSOR</u>				
MD & PhD	2.52	0.90	2.46	0.92
MD	2.50	0.93	2.50	0.92
PhD	2.07	0.72	2.05	0.74
Non-Doctoral	2.03	0.91	1.99	0.95
<u>INSTRUCTOR</u>				
MD & PhD	2.11	1.07	1.90	1.00
MD	2.13	0.93	2.08	0.91
PhD	1.82	0.81	1.86	0.81
Non-Doctoral	1.87	0.86	1.85	0.84
<u>LECTURER & OTHER</u>				
MD & PhD	1.60	1.12	1.69	0.85
MD	2.05	1.00	2.06	0.97
PhD	1.40	0.78	1.43	0.75
Non-Doctoral	1.65	0.90	1.68	0.95
Grand Mean	2.44	0.98	2.44	0.98

with rank and degree, except for M.D. faculty in the upper ranks. Generally, M.D.'s have a slightly higher mean number of responsibilities than do M.D.-Ph.D.'s. Although information on faculty workload is unavailable, the mean number of responsibilities for each rank and degree type have not changed since 1970-71.

Table 8 shows the distribution of areas of responsibilities for M.D.'s, Ph.D.'s and non-doctoral faculty. In 1973-74, 27 percent of the plurality of M.D.'s were doing teaching, research and patient service combined. The majority of Ph.D.'s (52 percent) were involved in teaching and research combined. The modal number of faculty with the masters degree or less combined teaching with patient services (17 percent).

Table 9 summarizes from Table 8 the teaching and research responsibilities of faculty. A full activity is the only one performed by the faculty member at the medical school. A part activity is performed in conjunction with one or more other activities. Table 9 shows that over 90 percent of the M.D.'s are involved in teaching activities. This percentage of involvement drops to 86 percent and 70 percent for Ph.D.'s and nondoctoral faculty, respectively. These percentages are very similar to 1970-71. With regard to research, M.D.-Ph.D.'s represent the highest percentage (81 percent) of those engaged in research as part of their total activities. It is interesting to note that 65 percent of nondoctoral faculty and 41 percent of M.D.'s do no

Area of Responsibility of Medical
School Faculty By Type of Degree
1973-74

FACULTY RESPONSIBILITY	1		2		Ph.D.		Non-Doctoral	
	Total	%	Total	%	Total	%	Total	%
ONE AREA OF RESPONSIBILITY								
Teaching	1654	6	1104	7	245	4	305	12
Research	1282	5	327	1.9	747	11	208	9
Service	582	2	379	2	42	.6	161	7
Administration	364	1.4	181	1.1	69	1.0	114	6
Other	101	.4	29	.2	9	.1	63	3
TWO AREAS OF RESPONSIBILITY								
Teaching and research	5210	20	1380	8	1660	52	170	7
Teaching and service	3491	13	2893	17	189	3	409	17
Teaching and administration	618	2.4	347	2	103	1.5	168	7
Teaching and other	82	.3	37	.2	12	.2	33	1.6
Research and service	183	.7	101	.6	51	.7	31	1.2
Research and administration	100	.4	23	.1	54	.8	23	1.0
Research and other	31	.1	6	.0	16	.2	9	.2
Service and administration	144	.6	73	.4	25	.4	46	2
Service and other	13	.1	7	.0	1	.0	5	.1
Administration and other	18	.1	3	.0	2	.0	13	.4
THREE AREAS OF RESPONSIBILITY								
Teaching, research and service	5149	20	4456	27	522	8	171	8
Teaching, research, and administration	1409	5	622	4	722	10	65	3
Teaching, research and other	126	.5	56	.3	50	.7	20	1.3
Research, service and administration	55	.2	22	.1	23	.3	10	.3
Research, service and other	2	.0	0	.0	0	.0	2	.1
Service, teaching and administration	1519	6	1253	7	83	1.2	183	8
Service, teaching and other	112	.4	104	.6	2	.0	6	.1
Service, administration and other	8	.0	1	.0	0	.0	7	.0
Administration, teaching and other	37	.1	17	.1	5	.1	15	.6
Administration, research and other	5	.0	0	.0	2	.0	3	.1
FOUR AREAS OF RESPONSIBILITY								
Teaching, research, service and administration	3584	14	3189	19	309	4	86	5
Teaching, research, service and other	74	.3	59	.4	9	.1	6	.4
Research, service, administration and other	1	.0	1	.0	0	.0	0	.0
Service, teaching, administration and other	29	.1	20	.1	0	.0	9	.4
Administration, teaching, research and other	36	.1	15	.0	18	.3	3	.2
FIVE AREAS OF RESPONSIBILITY								
Teaching, research, service, administration and other	162	.6	134	.8	23	.3	5	.1
TOTAL	26181	(100%)	16839	(100%)	6993	(100%)	2349	(100%)

¹ Excludes 401 (1 percent) faculty whose area of responsibility was not reported.

² Includes MD-PhD's.

TABLE 9

Distribution of Teaching and Research Responsibilities
Of Medical School Faculty
1970-71 & 1973-74

RESPONSIBILITIES	TOTAL ¹ 1973-74		MD-PhD			MD			PhD			NON-DOCTORAL		
			1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	%	#	%	%	#	%	%	#	%	%	#	%	%
Full Teaching Activity	1654	6	49	4	4	1055	7	7	245	4	3	305	13	12
Part Teaching Activity	21638	83	1182	88	86	13400	86	85	5707	82	81	1349	57	54
No Teaching Activity	2889	11	112	8	10	932	6	8	1041	15	15	695	30	34
TOTAL	26181	100%	1343	100%	100%	15496	100%	100%	6993	100%	100%	2349	100%	100%
Full Research Activity	1282	5	73	5	6	254	1.6	1.8	747	11	10	208	9	8
Part Research Activity	16127	62	1086	81	79	8978	58	58	5459	78	77	604	26	23
No Research Activity	8772	34	184	14	15	6264	40	40	787	11	12	1537	65	69
TOTAL	26181	100%	1343	100%	100%	15496	100%	100%	6993	100%	100%	2349	100%	100%

¹ Excludes 401 (1 Percent) Faculty Whose Area of Responsibility Was Not Reported.

research, whereas only 11 percent of the Ph.D.'s do no research. This distribution is similar to that for 1970-71.

Participation in Federal Programs

A large number of medical schools participate in training and/or research programs which are sponsored by various Federal agencies. Information concerning faculty participation in these programs is presented in Tables 10 and 11.

Table 10 indicates 5,808 faculty or 23 percent of the total faculty force in 1973-74 are participating in at least one NIH training grant. This estimate, however, reflects a lower total level of participation than was found in 1970-71. The data presented in this table indicates that 29 percent of the 1970-71 faculty force was involved in NIH training grants. The greatest drop in participation rates was experienced by non-doctoral faculty. The reduction in participation rates for the other degree types was at about the same level.

The reduction in faculty participation rates in the other Federal programs is much less noticeable (Table 11). A total of 10,053 faculty or 40 percent indicate that they were currently involved in other Federal programs. The data presented in this Table indicate that, roughly 42 percent of the faculty in 1970-71 were participants in similar programs. For both years, the Ph.D's have a generally higher participation rate than other degree types.

TABLE 10

**Distribution of Medical School Faculty
By Current Participation¹
In NIH Training Grants by Degree Type
1970-71 & 1973-74**

DEGREES	NON-PARTICIPANTS			ONE GRANT			TWO GRANTS			THREE GRANTS		
	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	% ³	% ³	#	% ³	% ³	#	% ³	% ³	#	% ³	% ³
MD-PhD	867	66	61	362	28	32	61	5	6	14	1.1	1.2
MD	11587	78	72	2774	19	24	360	2	3	91	0.6	0.9
PhD	4855	71	64	1668	25	31	247	4	5	31	0.5	0.6
Non-Doctoral	2020	91	67	178	8	8	20	0.9	26	2	0.0	0.2
TOTAL	19329²	77	71	4982	20	25	688	3	3	138	0.6	0.8

¹ Excludes NIMH Training Grants.

² Excludes 1,445 (5 Percent) Faculty Whose Level of Participation is Unknown.

³ Percentage Within Degree Type.

TABLE 11

Distribution of Medical School Faculty
By Current Participation in Federal Programs¹
By Degree Type
1970-71 & 1973-74

DEGREES	NON-PARTICIPANTS			ONE GRANT			TWO GRANTS			THREE GRANTS			FOUR OR FIVE GRANTS		
	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	% ³	% ³	#	% ³	% ³	#	% ³	% ³	#	% ³	% ³	#	% ³	% ³
MD-PhD	614	47	44	466	36	39	158	12	12	45	3	4	21	2	1.0
MD	9850	66	65	3667	25	26	933	6	7	278	1.9	1.8	99	1.1	0.2
	3091	45	42	2657	39	41	788	12	13	227	3	3	71	1.0	1.0
Non-Doctoral	1580	71	70	577	26	26	58	3	3	7	0.3	0.4	1	0.0	0.0
TOTAL ²	15135	60	58	7367	29	31	1937	8	8	557	2	2	192	0.8	0.6

¹Non-NIH Training Grants.

²Excludes 1394 (5 Percent) Faculty Whose Level of Participation is Unknown.

³Percentage Within Degree Type.

Table 12 presents faculty participation rates in combined Federal training and research grants by major academic department. Departmental participation rates range from 11 percent of the faculty in the Department of Surgery to 91 percent in the Department of Biophysics, with a total average of 46 percent involvement per department. Some faculty receive a portion, if not all of their salary, from the training or research grant. The range of some salaried participation in each department varies from 1 to 19 percent of the NIH Training Grants, and 9 to 76 percent in the other Federal programs.

The number of NIH training awards for each specialty is presented in Table 13. Two specialties, internal medicine (13 percent) and psychiatry (11 percent) receive the highest percentage of training grants.

Figure 2 shows the participation rates of faculty in the non-training type Federal programs by supporting agency. Clearly, the National Institutes of Health is a major source of support for some faculty at medical schools. Almost 7 out of every 10 faculty who are participants in one or more of these Federal programs are sponsored through NIH.

Table 14 presents faculty participation rates in various Federal agency programs. The plurality of faculty participants are involved in NIH research project grants (37 percent). This plurality is true for each degree type except non-doctoral's who have higher rates of participation (39 percent) in other U.S. Department of Health, Education and Welfare (DHEW) research programs.

TABLE 12

Distribution of Medical School Faculty
Participating in Total Federal Programs
By Major Academic Departments
1973-74

DEPARTMENTS	NUMBER OF PARTICIPANTS #	PERCENT OF DEPARTMENT TOTALS %	PERCENT OF INDIVIDUALS RECEIVING SOME SALARY FROM FEDERAL PROGRAMS	
			NIH Training Grants %	Other Federal %
Anatomy	489	53	6	24
Biochemistry	699	79	4	40
Biophysics	116	91	9	76
Genetics	74	89	12	55
Microbiology	530	69	6	36
Pathology	695	39	5	17
Pharmacology	505	73	7	40
Physiology	633	67	6	36
Biometry	48	52	10	35
Anesthesiology	166	21	1	9
Dermatology	73	43	12	21
Molecular Biology	75	58	3	35
Medicine	2156	49	9	28
Neurology	342	64	19	31
Ob-Gyn	299	32	13	21
Ophthalmology	232	53	12	24
Orthopedics	61	28	3	12
Otolaryncology	155	60	17	21
Pediatrics	994	45	7	28
Phys Med & Rehab	226	56	3	34
Psychiatry	1362	45	15	22
Pub Hlth & Prev Med	405	52	11	28
Radiology	451	30	6	14
Surgery	813	11	2	5
Family Practice	132	38	7	23
Other	510	34	5	19
TOTAL	12301	46	17	53

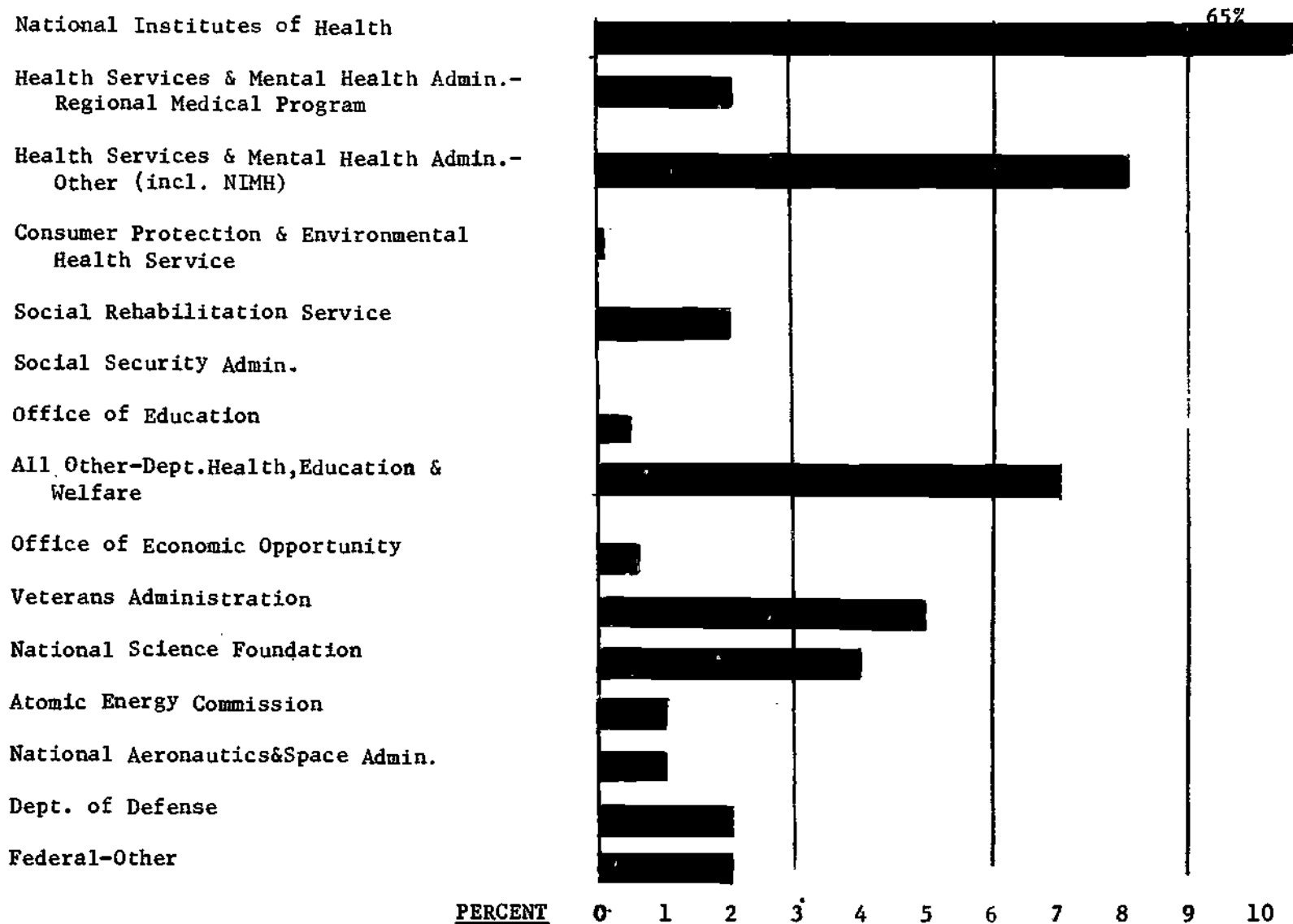
TABLE 13

Distribution of Medical Faculty Participants
In NIH Training Programs By Grant Specialty
1973-74

PRIMARY SPECIALTY	TOTAL PARTICIPANTS	PERCENT OF SPECIALTIES PARTICIPATING
<u>Basic Sciences</u>		
Anatomy	218	3
Biochemistry	346	5
Biology, All	60	0.9
Biophysics	52	0.8
Genetics	97	1.2
Immunology	94	1.2
Micro-Parasitology	261	4
Pathology - BSC	232	4
Pharmacology	346	5
Physiology	472	7
Zoology	1	0.0
All Other	20	0.3
<u>Clinical Sciences</u>		
Anesthesiology	113	1.7
Dermatology	48	0.8
Endocrinology	140	2
Family Practice	36	0.5
Internal Medicine	835	13
General Medicine	60	0.9
Nuclear Medicine	37	0.5
Neurology	253	4
Ob & Gyn	29	0.4
Oncology	231	4
Pathology Clin	177	3
Pediatrics	186	3
PM & R	20	0.3
Pub Hlth & Prev	125	1.9
Psychiatry	749	11
Radiology	188	3
Surgery	610	9
All Other	47	0.7
<u>Physical Science</u>	56	0.8
<u>Behavioral Science</u>	18	0.3
Psychology	131	2
Sociology	25	0.4
Other	32	0.5
<u>Allied Health</u>	194	0.3
<u>Administration</u>	7	0.0
<u>Other</u>	2	0.0
<u>TOTAL</u>	6548	(100%)

FIGURE 2

Faculty Participation Levels In
Federally Sponsored Programs¹ By Supporting Agencies
1973-74



37

¹Non-Training Programs

TABLE 14

Distribution of Faculty Participation Rates
by Agency Program and Degree Type
1973-74

AGENCY PROGRAM	MD-PhD		MD		PhD		NON-DOCTORAL		TOTAL	
	#	%	#	%	#	%	#	%	#	%
NIH Basic Improvement Grant	9	1.0	156	2	87	1.8	19	3	271	2
NIH Special Improvement Grant	22	2	200	3	118	2	9	1.4	349	3
NIH General Research Support Grant	109	12	663	11	660	14	29	5	1461	12
NIH Research Project Grant or Contract	403	43	2114	34	2018	42	139	22	4674	37
Physician Augmentation Program	28	3	180	3	100	2	14	2	322	3
Regional Medical Program	11	1.2	167	3	30	0.6	23	4	231	1.8
Material and Infant Care Center	8	0.9	73	1.2	12	0.2	13	2	106	0.8
Children and Youth Center	10	1.1	97	1.5	25	0.5	18	3	150	1.2
Community Health Center	6	0.6	50	0.8	26	0.5	12	2	94	0.7
Comprehensive Health Center	0	0.0	44	0.7	12	0.2	12	2	68	0.5
Research Career Development Award	25	3	199	3	166	3	0	0.0	390	3
HSMHA Neighborhood Health Center	1	0.0	25	0.4	12	0.2	11	2	49	0.4
Other DHEW Research Grants or Contracts	162	17	1327	21	728	15	253	39	2470	19
Other Federal Research Grants	136	15	977	16	853	18	90	14	2056	16
TOTAL	930	(100%)	6272	(100%)	4847	(100%)	642	(100%)	12,691	(100%)

EDUCATIONAL CHARACTERISTICS

This chapter provides information on the educational background of faculty and includes additional awards or training experiences beyond their professional degree such as internships, residencies, board certifications and pre-doctoral and post-doctoral training.

Figure 3 shows the year in which faculty received their professional degrees. The majority of faculty completed their professional course work in the last 15 years. Almost half with Ph.D.'s (47 percent) received their degrees in the 1960's. While the plurality of M.D.'s received their degrees in the 1960's (39 percent), almost as many received their degrees in the 1950's (34 percent). Also most master's degrees were awarded in the 1960's (43 percent).

Table 15 through Table 19 profile the educational characteristics of M.D. (including M.D.-Ph.D's) faculty members.

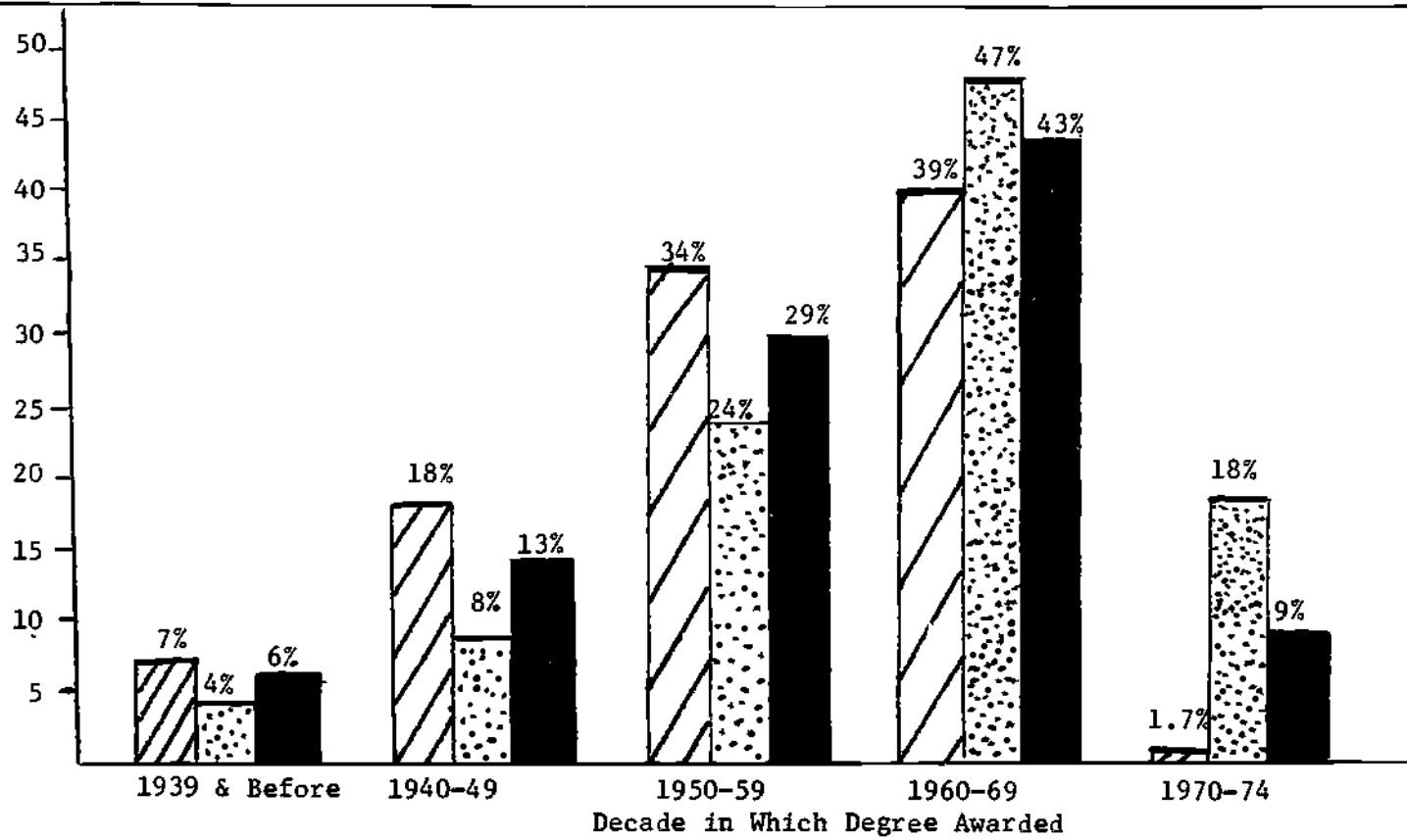
Internships

Table 15 presents the number of internships completed by faculty in each academic rank. The percentage of M.D.'s without internships is about the same, approximately 13 percent, across ranks. More than eight out of ten M.D. faculty have one internship. Generally, the percent of M.D.'s with two internships decreases with rank. The proportion of internships by rank in 1973-74 has not appreciably changed since 1970-71.

FIGURE 3

U.S. Medical School Faculty
Degrees Awarded by Decade
1973-74

Percent



M.D. Degree



Ph.D. Degree



Masters Degree

40

TABLE 15

Distribution of M.D. Medical School Faculty
By Rank and Number of Internships
1970-71 & 1973-74

RANK	NUMBER OF INTEPNSHIPS								
	NONE			ONE			TWO		
	1973-74 ¹		1970-71	1973-74		1970-71	1973-74		1970-71
	#	% ²	% ²	#	% ²	% ²	#	% ²	% ²
Full Professor	646	13	13	4235	84	84	143	3	3
Associate Professor	538	13	12	3505	85	85	82	2	2
Assistant Professor	725	12	12	5006	86	86	73	1.3	1.5
Instructor	222	13	13	1439	86	86	19	1.1	1.1
Lecturer & Other	41	14	15	252	84	82	7	2	2
TOTAL	2172	13	13	14437	85	85	324	1.9	2

(1) Excludes 193 (2 Percent) Faculty Whose Number of Internships is Unknown.

(2) Percentage Distribution Within Rank. Percents May Not Total 100 Because of Rounding.

Residencies

Tabulations on the number of residencies completed by M.D. faculty is shown in Table 16. The middle ranks have the lowest percentage of faculty without residencies. Each rank has about fifty percent faculty with one residency and another twenty-five percent with two residencies. The distribution of residencies by rank has not changed substantially since 1970-71.

Table 17 displays the total number of completed residencies by the type of residency. A total of 6575 M.D. faculty took a residency in internal medicine which represented almost one out of every three residencies. Pediatrics and general surgery are the next highest in popularity, both contributing 11 percent of the residencies.

Board Certifications

The number of board certifications for each rank are given in Table 18. Unlike internships and residencies, the percent of M.D.'s without board certification is clearly related to rank. Sixty-seven percent of the instructors are not board certified,

TABLE 16

Distribution of M.D. Medical School Faculty
By Rank and Number of Residencies
1970-71 & 1973-74

RANK	NUMBER OF RESIDENCIES														
	NONE			ONE			TWO			THREE			FOUR		
	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	% ²	% ²	#	% ²	% ²	#	% ²	% ²	#	% ²	% ²	#	% ²	% ²
Full Professor	677	14	14	2604	52	53	1319	26	26	335	7	6	70	1.4	1.4
Associate Professor	414	10	10	2120	52	53	1161	28	28	335	8	8	80	2	2
Assistant Professor	446	8	8	3180	55	54	1580	27	29	472	8	8	121	2	2
Instructor	157	9	8	952	57	60	443	26	24	98	6	6	32	1.9	2
Lecturer and Other	52	17	15	136	45	51	91	30	27	19	6	6	1	0.3	1.0
TOTAL	1746	10	10	8992	53	54	4594	27	27	1259	7	7	304	1.8	1.9

(1) Excludes 231 (1 Percent) Faculty whose Number of Residencies is Unknown.

(2) Percentage Distribution Within Rank. Percents May Not Total 100 Because of Rounding.

TABLE 17

Distribution of Residency Specialties
Of M.D. Medical School Faculty
1973-74

RESIDENCY	NUMBER	PERCENT
Pathology	1861	8
Anesthesiology	879	4
Dermatology	242	1.1
Internal Medicine	6750	30
Neurology	801	4
Obstetrics-Gynecology	993	4
Ophthalmology	387	1.7
Orthopedic Surgery	492	2
Otolaryngology	238	1.1
Pediatrics	2496	11
Physical Medicine & Rehab.	224	1.0
Child Psychiatry	180	0.8
General Psychiatry	2248	10
Radiology	1061	5
General Surgery	2484	11
Neurological Surgery	253	1.1
Plastic Surgery	108	0.5
Thoracic Surgery	185	0.8
Urology	294	1.3
General Practice	126	0.6
Other	309	1.4
TOTAL	22611 ¹	(100%)

¹ The Mean Number of Residencies for the 15149 M.D. Faculty who had Residencies was 1.5.

TABLE 18

Distribution of M.D. Medical School Faculty
By Rank and Number of Board Certifications
1970-71 & 1973-74

RANK	NUMBER OF CERTIFICATIONS								
	NONE			ONE		TWO			
	1973-74 ¹		1970-71	1973-74		1970-71	1973-74		1970-71
	#	% ²	% ²	#	% ²	% ²	#	% ²	% ²
Full Professor	962	19	18	3281	65	67	776	15	15
Associate Professor	932	23	21	2620	64	66	543	13	13
Assistant Professor	2200	38	35	3106	54	58	436	8	7
Instructor	1124	67	71	526	31	27	31	1.8	1.7
Lecturer & Other	169	56	59	123	40	37	12	4	4
TOTAL	5387	32	31	9656	57	59	1798	11	10

- (1) Excludes 285 (1.7 Percent) Faculty Whose Number of Board Certifications is Unknown.
- (2) Percentage Distribution Within Rank. Percents May Not Total 100 Because of Rounding.

compared to only 19 percent of the full professors. Full professors and associate professors both have about 65 percent of the faculty with one certification. Instructors and lecturers experienced a slight increase in the percent of faculty with board certification since 1970-71.

Table 19 presents the board certification specialties completed by the M.D. faculty. As with residencies, the majority of certifications were awarded in internal medicine (21 percent) and pediatrics (12 percent).

Predoctoral Support

Pre-doctoral support refers to support received while working toward a doctoral degree. As observed in Table 20, only 26 percent of the faculty who responded to this question had received pre-doctoral support, a percentage similar to that for 1970-71. Since nearly two-thirds of the faculty are M.D.'s, the low percentage rate is primarily the result of less than one out of 10 M.D.'s having received pre-doctoral support. Most PhD's (64 percent), however, have had pre-doctoral support.

Table 21 presents the source of pre-doctoral awards. Clearly, NIH has provided more support than any other single source (32%). When looking at degree type, private foundations, along with NIH have provided the most support for M.D. faculty.

TABLE 19

Distribution of Board Certifications
Awarded to M.D. Medical School Faculty
1973-74

BOARD CERTIFICATIONS	NUMBER	PERCENT
Anatomic Pathology	658	5
Clinical Pathology	249	2
PA & Clinical Pathology	228	2
Anesthesiology	517	4
Dermatology	191	2
Internal Medicine	2730	21
Cardiovascular Diseases	196	1
Neurology	198	1
Obstetrics and Gynecology	628	5
Ophthalmology	279	2
Orthopedic Surgery	311	2
Otolaryngology	192	1
Pediatrics	1604	12
Physical Medicine and Rehab.	161	1
Psychiatry and Neurology	712	5
Child Psychiatry	120	0.9
Psychiatry	526	4
Radiology	712	5
Surgery	1080	8
Neurological Surgery	165	1
Thoracic Surgery	233	2
Urology	173	1
Family Practice	131	1
Other	1360	10
TOTAL	13,254 ¹	(100%)

(1) Total Reflects on the Average 1.16 Certifications for the 11454 Faculty Who Were Certified.

TABLE 20

Distribution of Doctoral Medical Faculty
By Number of Pre-Doctoral Awards
1970-71 & 1973-74

NUMBER OF AWARDS	MD-PhD			MD			PhD			TOTAL		
	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	%	%	#	%	%	#	%	%	#	%	%
None	850	65	68	136	96	92	2463	36	39	17009	74	74
One	342	26	26	1021	7	7	3146	46	45	4509	19	19
Two	89	7	5	184	1.2	1.2	1025	15	13	1298	6	5
Three	18	1.4	1.3	33	0.2	0.2	269	4	3	320	1.4	1.2
TOTAL	1299 (100%)		(100%)	14934 (100%)		(100%)	6903 (100%)		(100%)	23136 (100%)		(100%)

TABLE 21

Source of Pre-Doctoral Awards
By Doctoral Degree Type of Medical School Faculty
1973-74

SOURCE	MD-PhD		MD		PhD		GRAND TOTAL	
	#	%	#	%	#	%	#	%
NIH	141	26	289	20	2018	35	2448	32
Other - Public Health Service	47	9	118	8	562	10	727	9
HSMHA	4	0.7	12	0.8	109	1.9	125	1.6
VA	11	2	40	3	136	2	187	2
	16	3	25	2	316	6	357	5
FED - Other	17	3	63	4	305	5	385	5
Foreign	26	5	45	3	120	2	191	2
Industry	18	3	36	3	140	2	194	3
Foundation	94	17	269	19	403	7	766	10
Misc	31	6	79	6	157	3	267	3
Academic - Foreign	15	3	29	2	53	0.9	97	1.3
Academic	119	22	341	24	1068	19	1528	20
Other	11	2	76	5	307	5	394	5
TOTAL AWARDS	550	(100%)	1422	(100%)	5694	(100%)	7445	(100%)

Post-Doctoral Support

Post-doctoral support follows one or more doctoral degrees and reflects training not directed toward obtaining a degree. Table 22 indicates that only half of those who responded to this question have had post-doctoral support. However, unlike pre-doctoral support, M.D. faculty have experienced about the same, about 50 percent, participation as PhD faculty. Sixty-three percent of MD-PhD faculty have been awarded post-doctoral support, the highest level of participation for doctoral degree holders.

The funding sources for those who have received post-doctoral training is shown in Table 23. Again, NIH has been the highest supporter (44 percent) of medical school faculty engaged in post-doctoral training, even to a greater extent than pre-doctoral support. This observation is true for each degree type. Faculty who received post-doctoral support from private foundations represent almost two out of every ten post-doctorals for each degree type.

Table 24 shows the primary specialty of faculty who have received pre- or post-doctoral support. When compared to all specialties, faculty with biochemistry specialties have the highest percentage of faculty with pre-doctoral support (16 percent), followed by physiology (11 percent), psychology (10 percent) and physical science (9 percent) specialties.

TABLE 22

Distribution of Doctoral Medical Faculty
By Number of Post-Doctoral Awards
1970-71 & 1973-74

NUMBER OF AWARDS	MD-PhD			MD			PhD			TOTAL		
	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	%	%	#	%	%	#	%	%	#	%	%
None	491	37	36	7710	50	49	3411	50	51	11612	49	49
One	509	39	39	5049	33	33	2478	36	35	8036	34	34
Two	212	16	17	1918	13	13	758	11	11	2888	12	13
Three	81	6	6	509	3	3	167	2	2	757	3	3
Four	25	1.5	1.7	146	1.0	0.9	46	0.7	0.7	217	0.9	0.9
TOTAL	1318 (100%)		(100%)	15332(100%)		(100%)	6860 (100%)		(100%)	23510 (100%)		(100%)

TABLE 23

Source of Post-Doctoral Awards
By Degree Type of Medical School Faculty
1973-74

SOURCE	MD-PhD		MD		PhD		GRAND TOTAL	
	#	%	#	%	#	%	#	%
NIH	421	33	4784	44	2199	47	7404	44
Other - Public Health Service	127	10	1027	9	380	8	1534	9
HSMHA	11	0.9	319	3	94	2	424	3
VA	11	0.9	249	2	19	0.4	279	1.7
NSF	11	0.9	27	0.2	215	5	253	1.5
FED-Other	47	4	286	3	225	5	558	3
Foreign	68	5	143	1.3	100	2	311	1.9
Industry	24	1.9	127	1.1	83	2	234	1.4
Foundation	319	25	2074	19	766	17	3159	19
Misc	47	4	301	3	96	2	444	3
Academic-Foreign	49	4	71	0.6	41	0.8	161	0.9
Academic	94	7	1066	10	326	7	1486	9
Other	46	4	328	3	96	2	470	3
<u>TOTAL AWARDS</u>	1264	(100%)	10801	(100%)	4640	(100%)	16706	(100%)

TABLE 24

Pre- And Post-Doctoral Support Of
Medical School Faculty By Primary Specialty
1973-74

PRIMARY SPECIALTY	PRE-DOCTORAL		POST-DOCTORAL	
	#	% ¹	#	% ¹
<u>Basic Sciences</u>				
Anatomy	544	7	381	2
Biochemistry	1232	16	2005	12
Biology, All	237	3	191	1.1
Biophysics	146	2	197	1.2
Genetics	129	2	279	1.7
Immunology	63	0.8	242	1.5
Micro-Parasitol	597	8	515	3
Pathology-BSC	172	2	684	4
Pharmacology	461	6	590	4
Physiology	853	11	1226	7
Zoology	202	3	41	0.2
All Others	111	1.4	41	0.2
<u>Clinical Sciences</u>				
Anesthesiology	4	0.0	169	1.0
Dermatology	5	0.0	92	0.5
Endocrinology	64	0.8	562	3
Family Practice	3	0.0	10	0.1
Internal Med	175	2	2853	17
General Med	496	6	475	3
Nuclear Med	24	0.3	96	0.6
Neurology	16	0.2	376	2
Ob-Gyn	16	0.2	183	1.1
Oncology	16	0.2	246	1.5
Pathology Clin	36	0.5	524	3
Pediatrics	36	0.5	957	6
PM & R	8	0.1	112	0.7
Pub Hlth & Prev	105	1.3	195	1.2
Psychiatry	51	0.6	900	5
Radiology	64	0.8	388	2
Surgery	85	1.1	1178	7
All Other	19	0.2	78	0.5
<u>Physical Science</u>	729	9	382	2
<u>Behavioral Science</u>				
Psychology	783	10	272	1.6
Sociology	96	1.2	16	0.1
Other	8	0.1	13	0.1
<u>Allied Health</u>	185	2	89	0.5
<u>Administration</u>	20	0.2	9	0.0
<u>Other</u>	4	0.0	7	0.0

¹ Reflects the Percentage Within Each Specialty.

Internal medicine specialties have the highest percent (17) of faculty with post-doctoral support, though post-doctoral faculty with primary specialties in biochemistry are the second highest (12 percent).

Table 25 presents the departmental percentage of faculty who have received pre- or post-doctoral support. Biochemistry departments have the highest percentage of faculty who have had both pre-doctoral (69 percent) and post-doctoral support (72 percent). Over fifty percent of the faculty in eight departments have had pre-doctoral support, while post-doctoral faculty in ten departments are over the fifty percent mark.

TABLE 25

**Pre- And Post-Doctoral Support Of
Medical School Faculty By Department
1973-74**

DEPARTMENT	PRE-DOCTORAL SUPPORT		POST-DOCTORAL SUPPORT	
	#	% ¹	#	% ¹
Anatomy	531	58	385	42
Biochemistry	694	69	727	72
Biophysics	71	56	79	62
Genetics	47	57	54	65
Microbiology	434	56	434	56
Pathology	318	18	771	44
Pharmacology	420	61	448	65
Physiology	567	60	589	63
Biometry	40	43	16	17
Anesthesiology	50	6	202	26
Dermatology	24	14	82	49
Molecular Biology	79	61	84	65
Medicine	565	13	2849	65
Neurology	85	16	312	58
Ob-Gyn	104	11	333	36
Ophthalmology	58	13	209	48
Orthopedics	18	8	60	28
Otolaryngology	47	18	70	27
Pediatrics	293	13	1174	53
Phys Med & Rehab	50	12	118	29
Psychiatry	592	20	950	31
Pub Hlth & Prev Med	204	26	208	27
Radiology	205	14	457	30
Surgery	248	11	871	37
Family Practice	48	14	36	10
Other	326	20	366	22

¹ Reflects the Percentage Within Each Department.

EMPLOYMENT HISTORY

This chapter highlights information on the employment careers of medical school faculty. The topics include number of professional jobs, length of current employment, activity prior to first medical school appointment, and the type of previous employment for those with more than one job.

Number of Jobs

The total number of professional jobs for each degree type is presented in Table 26. The figures indicate that 44 percent of the total faculty have had only their current job. Almost three-fourths of the faculty with Master's degrees, however, have had other jobs, the highest average of the degree types.

The current appointment was the first professional employment for over one-half of the M.D. faculty. About thirty percent of the faculty have had two jobs, a percentage similar for each degree holder.

It is interesting to note the differences in these percentages between the two time periods. For each degree type, the percentage of those with more than one job has increased marginally since 1970-71.

Length of Current Employment

Table 27 presents the average length of current employment of faculty for each rank and degree type. While faculty with the Master's degree were shown to be over represented among those with

TABLE 26

Total Number of Jobs
Of Medical School Faculty
By Type of Degree
1970-71 & 1973-74

NUMBER OF JOBS	MD-PhD			MD			PhD			MASTERS			BACH/ASC & NONE			TOTAL		
	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	%	#	#	%	#	#	%	#	#	%	#	#	%	#	#	%	#
One (Current)	567	42	46	7516	48	53	2876	41	46	450	27	34	322	42	52	11731	44	49
Two	385	28	30	4630	29	28	2110	30	29	452	28	29	215	28	25	7792	29	28
Three	228	17	15	2191	14	13	1186	17	16	371	23	21	99	13	13	4075	15	14
Four	87	6	5	920	6	5	549	8	6	195	12	10	67	9	7	188	7	5
Five	62	5	3	348	2	1.4	216	3	2.2	98	6	4	37	5	3	761	3	1.9
Six	26	1.9	1.4	108	0.7	0.4	88	1.3	0.7	50	3	1.2	10	1.3	0.4	282	1.1	0.6
Seven	8	0.6	0.2	50	0.3	0.1	29	0.4	0.3	27	1.6	0.3	9	1.2	0.3	123	0.5	0.2
TOTAL	1363	(100%)	(100%)	15763	(100%)	(100%)	7054	(100%)	(100%)	1643	(100%)	(100%)	575	(100%)	(100%)	26582	(100%)	(100%)

TABLE 27

Length of Current Employment
Of Medical School Faculty By
Rank and Type of Degree
1970-71 & 1973-74

	1973-74		1970-71	
	MEAN YEARS	S.D.	MEAN YEARS	S.D.
<u>FULL PROFESSORS</u>				
MD - PhD	11.97	8.21	10.58	8.34
MD	12.33	8.10	11.07	8.08
PhD	12.54	7.48	11.10	7.62
Non-Doctoral	14.50	9.64	12.69	9.44
<u>ASSOCIATE PROFESSORS</u>				
MD - PhD	7.49	5.34	6.44	5.10
MD	8.05	5.60	7.49	5.51
PhD	8.22	5.25	7.06	4.93
Non-Doctoral	11.48	7.34	10.03	6.98
<u>ASSISTANT PROFESSORS</u>				
MD - PhD	4.24	3.73	3.30	3.15
MD	4.52	4.15	3.66	4.04
PhD	4.26	3.37	3.31	3.41
Non-Doctoral	7.60	5.91	6.24	6.03
<u>INSTRUCTORS</u>				
MD - PhD	3.67	4.61	2.88	3.88
MD	2.81	2.85	1.84	2.91
PhD	2.58	2.98	2.32	3.52
Non-Doctoral	5.01	5.33	4.14	4.92
<u>LECTURERS</u>				
MD - PhD	3.07	4.45	4.23	4.97
MD	3.81	4.74	3.31	4.96
PhD	4.79	5.12	3.91	4.60
Non-Doctoral	5.81	5.52	5.00	5.45

more than one job, much of the employment movement must have appeared earlier in their careers. As noted in Table 27, faculty with Master's degrees have been employed at their current medical school longer than the other degree types. This is true for each rank. When looking at other degree types, increase in rank is associated with increase in length of current employment, as one might expect. Within each rank, however, faculty with different types of doctoral degrees have about the same average length of current employment. When comparing 1973-74 figures with 1970-71 figures, there appears to be less job turnover in recent years.

Original Source

The original employment source of faculty is noted in Table 28. It is apparent that the majority of faculty came from some professional training program (63 percent), rather than professional employment. Roughly, only about three out of ten M.D. faculty came from professional employment. The plurality of M.D.'s were primarily engaged in an internship or residency (40 percent).

The majority of Ph.D.'s also came from a training program (54 percent). Additionally, of those Ph.D.'s who came from professional employment, most were at schools (non-medical) in other than a full faculty position.

Previous Employment

Figure 4 presents the last employment location of faculty who have had more than their current job. Unfortunately, for the non-doctoral faculty, nearly half had "other" or unknown

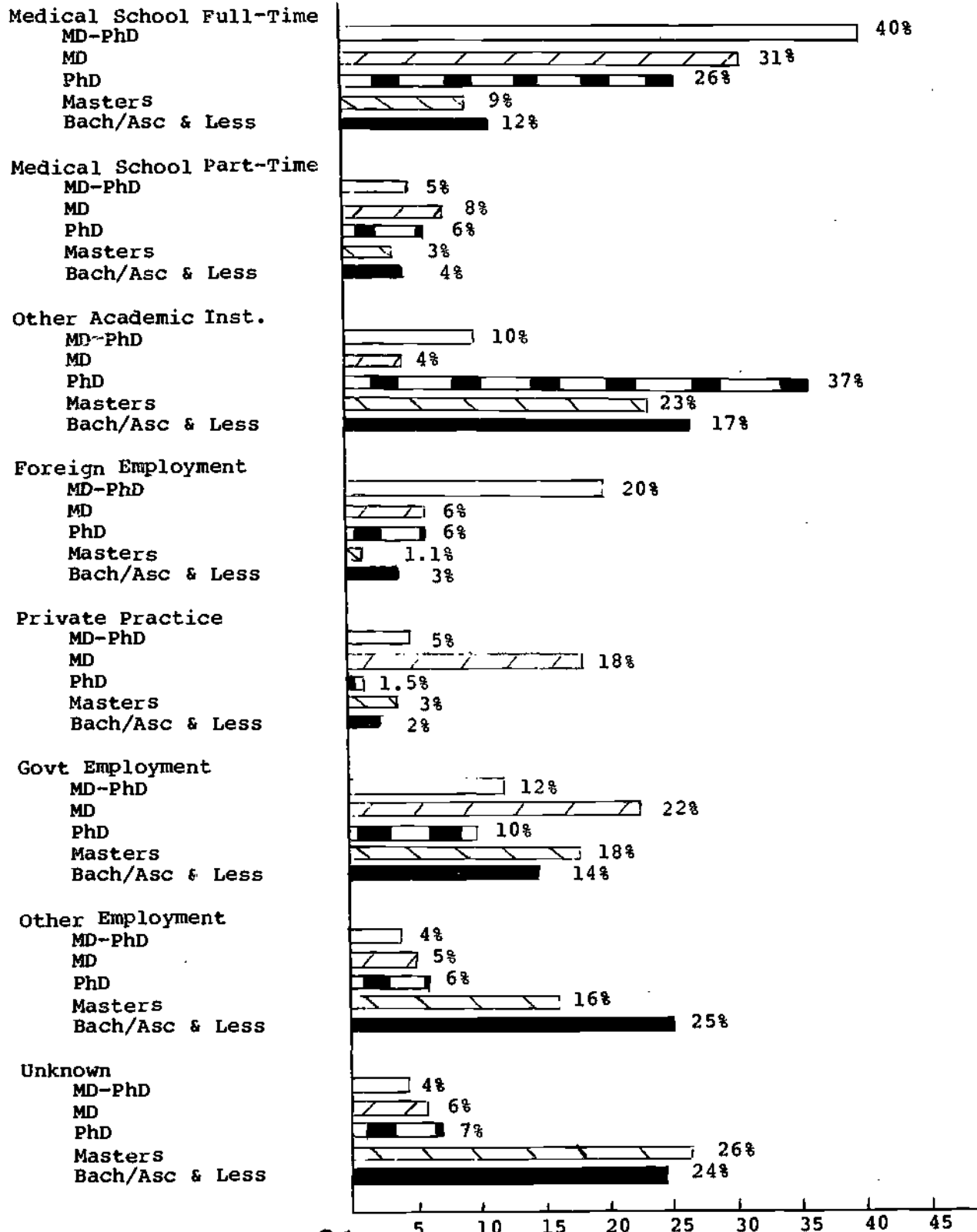
TABLE 28

Original Employment Source
Of Medical School Faculty
By Type of Degree
1973-74

SOURCE	MD-PhD		MD		PhD		NON-DOCTORAL		TOTAL	
	#	%	#	%	#	%	#	%	#	%
PROFESSIONAL EMPLOYMENT										
VOLUNTEER-SAME SCHOOL	1	0	121	0.7	10	0.1	13	0.5	145	0.5
VOLUNTEER-OTHER SCHOOL	3	0.2	29	0.1	2	0	0	0	34	0.1
FACULTY-U.S. NONMED SCHOOL	12	0.8	69	0.4	433	6	154	6	668	3
NON-MEDICAL SCHOOL	121	9	377	2	1781	25	486	20	2765	10
FOREIGN - ACADEMIC	37	3	96	0.6	73	1.0	2	0	208	0.7
FOREIGN - NON - ACADEMIC	9	0.6	25	0.1	18	0.2	5	0.2	57	0.2
PRIVATE PRACTICE	43	3	1828	12	64	0.9	38	1.6	1973	7
U.S. ACTIVE MIL SVC	47	3	816	5	52	0.7	33	1.3	948	4
U.S. GOVT	72	5	979	6	366	5	118	5	1535	6
U.S. HOSP NON-FED	9	0.6	166	1.0	55	0.7	125	5	355	1.3
FDN OR RES INST	5	0.3	26	0.1	57	0.7	17	0.7	105	0.3
U.S. ST LO GOVT	32	2	312	1.9	215	3	282	12	841	3
PRIV BUS OR IND	2	0	7	0	58	0.7	55	2	122	0.4
PROFESSIONAL TRAINING										
U.S. MED SCHOOL	33	2	324	2	232	3	29	1.2	618	2
U.S. EDUCAT INST	41	3	69	0.4	801	11	238	10	1149	4
INTERNSHIP -RESIDCY	419	31	6350	40	30	0.4	7	0.2	6806	26
NIH/NIMH TRN PROG	245	18	2470	16	1663	24	112	5	4490	17
OTHER TRN PROG	95	7	744	5	444	6	81	3	1364	5
OTHER	115	8	630	4	606	9	474	20	1862	7
UNKOWN	22	1.5	325	2	94	1.3	131	5	536	1.9
TOTAL	1363	(100%)	15763	(100%)	7054	(100%)	2402	(100%)	26582	(100%)

FIGURE 4

Previous Employment Location
Of Medical School Faculty
By Type of Degree
1973-74



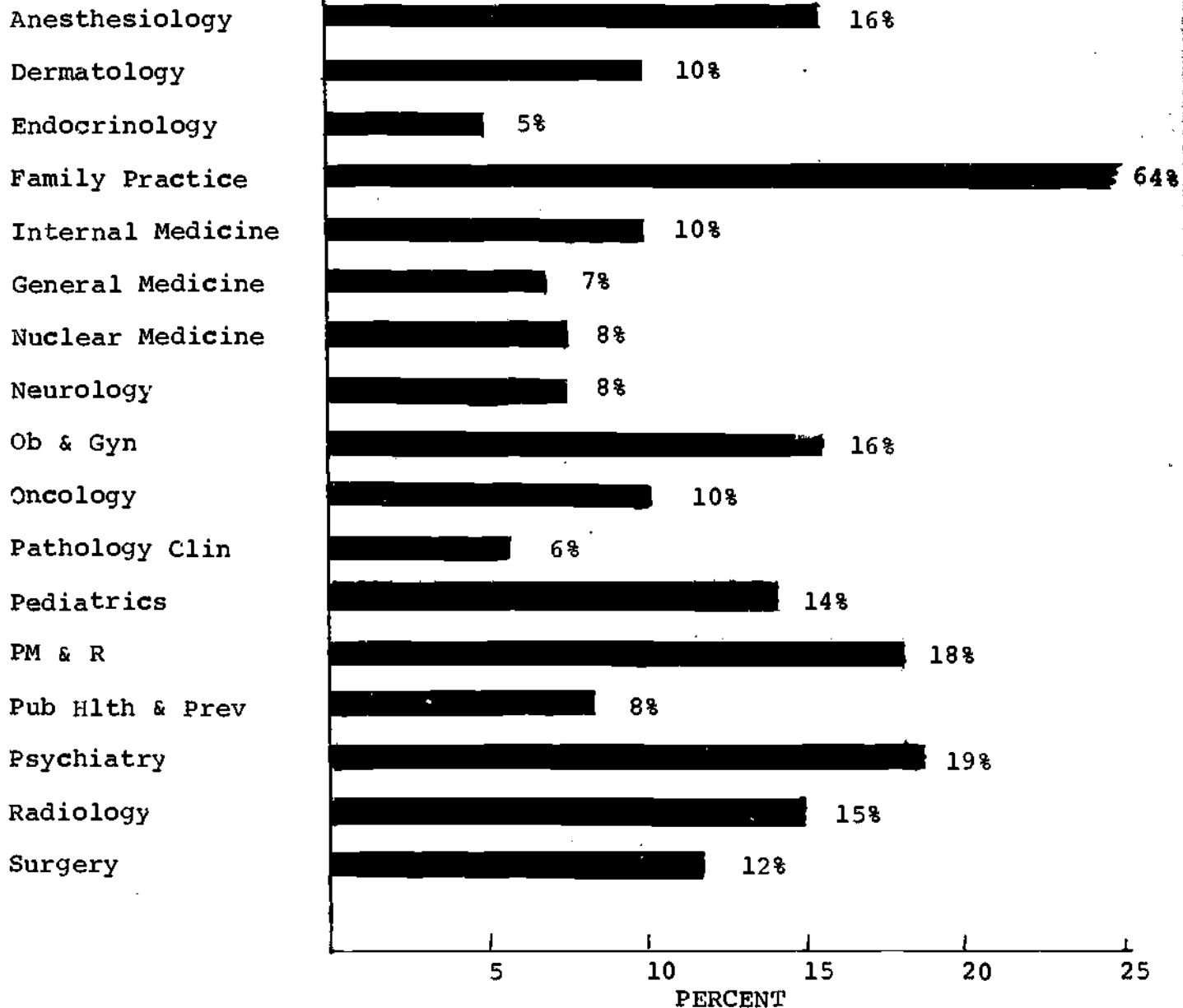
positions. The plurality of M.D.-Ph.D.'s were faculty themselves from other medical schools (45 percent), with another twenty percent coming from foreign employment. Thirty-nine percent of the M.D.'s were also medical school transfers. However, a sizeable portion came from a private practice (18 percent) and government employment (22 percent). Sixty-nine percent of the Ph.D.'s had transferred to their current job from schools (medical and non-medical) and other academic foundations.

Figure 5 presents the percentages of faculty in each clinical science department who have had private practice experience. It is interesting to note that 64 percent of the faculty in family medicine departments have had private practice experience. This could be due to the recent interest and subsequent growth of these departments due to physician recruitment from the private sector. The next highest percentage of faculty with private practice experience is found in psychiatry departments (19 percent).

FIGURE 5

MD Faculty With Private
Practice Experience
By Specialty
1973-74

CLINICAL SCIENCES



SPECIAL TOPICS

Faculty Characteristics by Sex

Tables 29a, b, and c compare the demographic, appointment and employment profiles of male and female faculty members at the 77 medical schools included in this study.

One can note in Table 29a that women represent approximately 15 percent of the total faculty in 1973-74. While there appears to be no major change in the overall percentage of women faculty since 1970-71, there has been a slight increase in the percentage of women with doctoral degrees since 1970-71. Most female faculty members are M.D.'s (39 percent) though women M.D.'s represent only ten percent of the total M.D. faculty. Compared to men, women represent 61 percent of all faculty with master's degrees and about 50 percent of the faculty with bachelor's degrees or less.

Although about the same percentage of male and female have Ph.D.'s, Table 29b indicates that female Ph.D.'s tend to be concentrated in the lower ranks, as is the case for all degree types.

Table 29c compares male and female faculty by differences in age, specialty, nature of employment, responsibilities, years of current employment, total number of jobs, and the original source of employment by type of degree. When looking at age by sex, women faculty with non-doctoral degrees are younger than

TABLE 29a

Sex of Medical School Faculty
By Type of Degree
1970-71 & 1973-74

DEGREE TYPE	MALE		FEMALE			PERCENTAGE OF OF WOMEN IN TOTAL	
	1973-74		1973-74	1970-71		1973-74	1970-71
	#	100%	#	100%	100%		
MD-PhD	1293	6	69	1.7	1.5	5	4
MD	14160	63	1579	39	37	10	9
PhD	6048	27	1001	25	24	14	14
Masters	637	3	1005	25	27	61	61
Bachelors/Less	373	1.7	377	9	10	50	50
Total	22511	85%	4031	15	15		

TABLE 29b

Rank and Degree
Distribution of Medical
School Faculty by Sex
1970-71 & 1973-74

	MALE			FEMALE			DISTRIBUTION OF WOMEN	
	1973-74 #	1970-71 %	1970-71 %	1973-74 #	1970-71 %	1970-71 %	1973-74 %	1970-71 %
<u>FULL PROFESSORS</u>								
MD - PhD	624	98	98	16	3	1.8	0.4	0.3
MD	4250	97	97	151	3	3	4	3
PhD	1729	94	95	117	6	5	3	2
Non-Doctoral	44	60	60	29	40	40	0.7	0.8
<u>ASSOCIATE PROFESSORS</u>								
MD -PhD	343	94	95	21	6	5	0.5	0.6
MD	3427	91	92	343	9	8	9	7
PhD	1600	87	89	230	13	11	6	5
Non-Doctoral	73	47	50	83	53	50	2	2
<u>ASSISTANT PROFESSORS</u>								
MD - PhD	267	91	93	27	9	7	0.7	0.6
MD	4816	87	88	727	13	12	18	17
PhD	2180	82	82	478	18	18	12	12
Non-Doctoral	296	47	42	339	53	58	8	9
<u>INSTRUCTORS</u>								
MD-PhD	41	91	98	4	9	2	0.1	0
MD	1381	82	82	301	18	18	7	8
PhD	333	77	77	102	23	23	3	2
Non-Doctoral	407	37	39	708	64	61	18	18
<u>LECTURERS & OTHER</u>								
MD - PhD	14	93	92	1	7	8	0	0
MD	243	83	84	51	17	16	1.3	1.4
PhD	194	73	69	73	27	31	1.8	2
Non-Doctoral	181	45	46	220	55	54	5	6
TOTAL	22443		65	4021			(100%)	(100%)

their male counterparts. In general, women appear younger than men, across each degree type.

Almost half of the women faculty with non-doctoral degrees are in Allied Health specialties with another quarter of the women in Behavioral Sciences. Male faculty with non-doctoral degrees are more evenly distributed across specialties with the plurality in Allied Health (21 percent), and Clinical Sciences (20 percent).

Table 29c also shows that there is a greater percentage of women faculty than men faculty who are part-time.

When comparing differences in the major areas of responsibilities, male faculty with non-doctoral degrees have a higher relative percentage of persons in research, and lower percentages in teaching than do their female counterparts. There is a slightly higher percentage of male Ph.D. faculty involved in a combination of teaching and research activities than female Ph.D. faculty. One can also note the greater percentage of research activities among male M.D.'s than female M.D.'s.

There appears to be no major difference between male and female faculty in length of employment at their current medical school, though women have slightly higher percentages in the zero to five year group.

Generally, male and female faculty members have held similar

TABLE 29c

Demographic And Appointment Characteristics
Of Medical School Faculty
By Sex and Type of Degree
1973-74

DESCRIPTORS	MALE FACULTY			FEMALE FACULTY		
	1973-74			1973-74		
	MD	PhD	Non-Doctoral	MD	PhD	Non-Doctoral
	100%	100%	100%	100%	100%	100%
<u>Age</u>						
Below 25	0	0.1	2	0.2	0.5	6
25-29	3	10	14	6	12	18
30-34	17	25	20	23	21	15
35-39	23	19	17	18	17	12
40-44	19	16	15	18	17	12
45-49	14	14	15	15	13	12
50-54	10	8	9	10	10	9
55-59	6	5	5	5	6	8
60-64	2	1.9	1.8	1.7	1.8	4
Above 64	3	2	1.8	3	2	2
<u>Specialties</u>						
Basic Science	12	66	12	11	60	9
Clinical Science	87	10	20	89	9	14
Physical Science	0.2	5	14	0.1	3	2
Behavioral Science	0.1	13	16	0.1	19	26
Allied Health	0.1	5	21	0.0	6	47
Administration	0.1	1.4	5	0.0	2	3
Other						
<u>Nature of Employment</u>						
Strict Full-Time	64	86	84	61	80	82
Geographic Full-Time	21	8	9	19	8	7
Part-Time	15	5	7	20	11	11
<u>Responsibilities</u>						
Full Teaching	6	3	9	6	5	15
Part Teaching	85	82	56	82	73	57
No Teaching	8	15	35	12	22	28
Full Research	1.8	10	10	2	17	7
Part Research	60	79	32	46	67	21
No Research	38	11	59	52	16	72
<u>Years Current Employment</u>						
0-5	50	49	55	55	54	56
6-10	23	26	26	22	24	23
11-15	15	14	11	14	14	12
16-20	6	6	5	5	5	4
21-25	3	3	2	1.0	2	2
26+	3	2	1.3	1.5	0.9	2
<u>Total # of Jobs</u>						
1 (Current)	46	41	30	54	38	33
2	30	30	29	25	27	27
3	14	17	21	12	18	19
4	6	7	11	5	10	11
5	2	3	5	1.9	4	6
6	0.8	1.1	2	0.9	2	3
7	0.3	0.3	1	0.4	0.9	1.7
<u>Source</u>						
Volunteer-Same School	0.7	0.1	0.6	0.8	0.2	0.5
Volunteer-Other School	0.2	0.0	0.0	0.2	0.1	0.0
Faculty-U.S. Non-Medical	0.4	6	6	0.8	7	7
Non-Medical School	3	25	20	2	25	21
Foreign-Acad	0.7	1.0	0.2	1.1	1.0	0.0
Foreign-Non-Acad	0.2	0.2	0.2	0.4	0.4	0.2
Private Practice	11	0.9	1.7	8	0.7	1.5
U.S. Active Ml Svc	6	0.9	3	0.1	0.0	0.2
U.S. Govt	6	5	8	3	4	3
U.S. Hosp Non-Fed	0.9	0.7	4	2	1.2	6
Fdn or Res Inst	0.2	0.7	1.1	0.1	1.4	0.4
U.S. St Lo Govt	1.9	3	10	3	4	13
Priv Bus or Ind	0.1	0.9	3	0.1	0.3	1.5
U.S. Med Sch	2	3	1.8	1.7	3	0.8
U.S. Educ Inst	0.7	11	9	0.4	12	11
Intern-Residcy	38	0.4	0.4	47	0.5	0.2
NIH/NIMH Trn Prog	16	24	4	15	21	5
Other Trn Prog	5	6	3	6	6	3
Other	5	8	20	5	10	22
Unknown	2	1.3	4	2	1.2	3



numbers of professional jobs across degree types, except for M.D.'s. Over half of all women with M.D.'s (54 percent) are in their first professional job, as compared to 46 percent of male M.D.'s.

When looking at the original employment source of male and female faculty, one observes little difference except for a higher percentage of men from military and Federal government sources. It is also interesting to note that a higher percentage of women come directly from an internship or residency than do men.

Minority Faculty Members

The Faculty Roster Questionnaire elicits responses from faculty as to their racial or ethnic identification. This section of the special studies compares faculty who are grouped by the racial/ethnic group of their designation on a number of variables.

The data on the following tables are from faculty who are U.S. citizens, only. Out of 26,582 faculty in 1973-74, 22728 or 86 percent are U.S. citizens.

Table 30a presents the questionnaire list of racial/ethnic categories by type of degree for the two points in time. As observed in Table 30a, non-Caucasians represent only 6 percent of the faculty force in 1973-74, a percentage quite similar to the same 77 medical schools in 1970-71. Black faculty have the highest percentage of minority representation in the total faculty at 2 percent.

When looking at degree types, Black and Mexican American faculty have the highest group percentages of non-doctoral faculty at 31 percent and 22 percent, respectively. Eighty-five percent of those designated as "other minority" are M.D.'s, constituting the highest percentage across groups.

Because of the small number and representation of non-Caucasian faculty, some ethnic groups were combined in Tables

TABLE 30a

Race/Ethnic Origin of Medical School Faculty With U.S. Citizenship
By Type of Degree
1970-71 & 1973-74

RACE/ETHNIC ORIGIN	1973-74		1970-71		1973-74								1970-71											
	TOTAL		TOTAL		MD-PhD		MD		PhD		Non-PhD		MD-PhD		MD		PhD		Non-PhD					
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%				
Black American	450	2	320	1.7	9	2	218	48	83	18	140	31	8	25	157	49	58	18	97	30				
American Indian	10	0.0	8	0.0	1	10	6	60	2	20	1	10	1	13	4	50	2	25	1	13				
Mexican American	49	0.2	28	0.2	1	2	22	45	15	31	11	22	-	-	16	57	7	25	5	18				
Puerto Rican	287	1.3	249	1.3	8	3	217	76	30	10	32	11	7	3	179	72	29	12	34	14				
Other Spanish	160	0.7	131	0.7	5	3	136	85	14	9	5	3	4	3	111	85	9	7	7	5				
Chinese/Japanese	321	1.4	251	1.3	24	7	158	49	116	36	23	7	24	10	121	48	90	36	16	6				
Other Asian	130	0.6	98	0.5	13	10	75	58	40	31	2	2	10	10	62	63	24	24	2	2				
Caucasian	21321	94	17678	94	922	4	12551	59	5855	27	1993	9	833	5	10456	59	4708	27	1681	10				
TOTAL	22728 (100%)		18763 (100%)																					

30b and c. The revised categories are Caucasian, Black, Asian (Chinese, Japanese, and other Asian) and other minority (American Indian, Mexican American, Puerto Rican, other Spanish).

Table 30b presents the distribution of ethnic groups by rank and type of degree for 1973-74. While each ethnic group has the highest percentages of their faculty as M.D. assistant professors, Blacks and Asians have lower percentages of M.D. faculty in the upper ranks.

Asian Ph.D.'s have greater representation in the upper ranks than do the other groups, especially when compared to Black and "other minority" faculty.

Table 30c compares faculty ethnic groups by their sex, specialty, nature of employment, responsibilities, total number of jobs, and years of current employment.

When comparing the ethnic groups by sex, the non-Caucasian groups have generally higher percentages of women faculty. In fact, close to one out of every three Black faculty members is a woman, the highest ratio among the groups.

While slightly over half the Caucasian, Black and Asian faculty have Clinical Science specialties, 72 percent of the "other minority faculty" have Clinical Science specialties. Caucasians and Asians, also have high percentages of faculty with Basic Science specialties at 35 and 38 percent each. Black faculty

TABLE 30b

**Rank And Degree Distribution
Of Medical School Faculty
With U.S. Citizenship By
Ethnic Group
1973-74**

<u>FULL PROFESSORS</u>	<u>CAUCASIAN</u>	<u>BLACK</u>	<u>ASIAN</u>	<u>OTHER MINORITY</u>
	100%	100%	100%	100%
MD - PhD	2	1.1	5	1.5
MD	19	7	10	19
PhD	8	3	8	2
Non-Doctoral	0.3	0	0	0.4
<u>ASSOCIATE PROFESSORS</u>				
MD - PhD	1.1	0.7	1.3	1.3
MD	15	12	18	17
PhD	7	4	12	5
Non-Doctoral	0.6	0.9	0.2	0.4
<u>ASSISTANT PROFESSORS</u>				
MD - PhD	0.7	0.2	2	0.4
MD	20	20	18	26
PhD	10	9	12	5
Non-Doctoral	3	7	0.7	3
<u>INSTRUCTORS</u>				
MD - PhD	0.1	0	0	0
MD	5	9	4	16
PhD	1.5	1.3	0.4	1.1
Non-Doctoral	4	17	3	1.7
<u>LECTURERS & OTHER</u>				
MD - PhD	0	0	0	0
MD	1.0	0.9	1.8	0.2
PhD	0.8	0.9	2	0.4
Non-Doctoral	1.5	6	1.3	0.6
TOTAL	(100%)	(100%)	(100%)	(100%)

TABLE 30c

Demographic And Appointment
 Characteristics of Medical School
 Faculty With U.S. Citizenship By
 Ethnic Group
 1973-74

	CAUCASION	BLACK	ASIAN	OTHER MINORITY
	100%	100%	100%	100%
<u>SPECIALTIES</u>				
Basic Sciences	35	19	38	19
Clinical Science	52	54	56	72
Physical Science	1.8	0.7	2	0.8
Behavioral Science	5	15	0.7	4
Allied Health	4	9	3	2
Administration	0.9	3	0.2	0.6
Other	0.9	0.7	0.9	1.4
<u>SEX</u>				
Male	85	71	82	83
Female	15	29	18	17
<u>NATURE OF EMPLOYMENT</u>				
Strict Full-Time	71	66	72	66
Geographic Full-Time	17	17	16	10
Part-Time	12	17	12	25
<u>NUMBER OF RESPONSIBILITIES</u>				
1	14	22	19	18
2	37	44	39	48
3	33	25	30	25
4	15	9	12	10
5	0.7	0.9	0.2	0.2
<u>RESPONSIBILITIES</u>				
Full Teaching	6	9	7	12
Part Teaching	83	73	78	80
Other	11	18	15	8
Full Research	4	2	10	1.6
Part Research	62	35	64	42
Other	34	62	26	57
<u>TOTAL NUMBER OF JOBS</u>				
1 (Current)	45	35	38	56
2	30	26	29	24
3	15	17	18	12
4	6	11	9	4
5	3	7	4	2
6	1.0	2	1.6	0.8
7	0.4	2	0.7	0
<u>YEARS CURRENT EMPLOYMENT</u>				
0-5	48	58	49	43
6-10	24	23	27	29
11-15	15	12	17	21
16-20	6	4	5	5
21-25	3	1.8	1.6	1.6
26+	3	1.1	1.3	0.6

have higher percentages of faculty with Behavioral Science and Allied Health Specialties.

Black and the "other minority" faculty have higher percentages of part-time faculty at 17 percent and 25 percent respectively. The "other minority" faculty have a lower percentage (10 percent) of persons with geographic appointments than do the other groups.

Caucasian faculty have the highest percentage of persons involved in three or more areas of responsibilities at close to 50 percent, while non-Caucasian faculty have higher percentages of faculty with only one responsibility.

The "other minority" faculty have the highest percentage of faculty who teach as a full or part activity (92 percent), while 75 percent of the Asians are involved in research as a full or part activity, the highest for the groups. Only 37 percent of Black faculty and 44 percent of "other minority" faculty are involved in research.

Black and Asian faculty have the lowest percentages of faculty who are in their first professional job at 35 percent and 38 percent, respectively. Black faculty also have the highest percentage of faculty who have been employed less than 6 years (58 percent).

Foreign Graduates in U.S. Medical School Faculties

U.S. Medical School Faculty who have received their professional academic preparation in countries other than the United States have generated much interest throughout academic medicine. This section of the special studies groups faculty into U.S. trained, Canadian trained and foreign trained categories for comparison on a number of characteristics.

Table 31a shows the distribution of those groups by their percentages of the total and for type of degree for 1973-74 and 1970-71. One can observe in Table 31a that the percentage representation of foreign trained persons in the faculty is very stable for both points in time. Canadian trained faculty represents 1.7 percent and foreign trained represents 14 percent of the total faculty.

When looking at type of degree, foreign faculty represent 35 percent of all those who are M.D.-Ph.D. and 17 percent of the total M.D. faculty force. Generally, Canadian and foreign trained faculty have lower representations of faculty with non-M.D. degrees.

Table 31b compares the rank by degree percentages of the three countries of training groups.

Canadian trained faculty have higher percentages of M.D. full professor (20 percent) and associate professors (19 percent)

TABLE 31a

Country of Training of Medical School Faculty
By Type of Degree
1970-71 & 1973-74

DEGREE	US			CANADIAN			FOREIGN		
	1973-74		1970-71	1973-74		1970-71	1973-74		1970-71
	#	%	%	#	%	%	#	%	%
MD - PhD	838	62	63	40	3	3	482	35	34
MD	12650	81	81	312	2	2	2719	17	16
PhD	6489	92	91	72	1.0	1.0	475	7	7
Non-Doctoral	2180	98	97	5	0.2	0.2	40	1.8	1.4
TOTAL	22157	83	84	429	1.7	1.7	3716	14	14

TABLE 31b

Rank and Degree Distribution
Of Medical School Faculty By
Country of Training
1973-74

FULL PROFESSORS	US		CANADIAN		FOREIGN	
	#	%	#	%	#	%
MD - PhD	445	2	20	5	176	5
MD	3828	17	86	20	485	13
PhD	1695	8	14	3	136	4
Non-Doctoral	65	0.3	1	0.2	2	0.1
<u>ASSOCIATE PROFESSORS</u>						
MD - PhD	213	1.0	14	3	136	4
MD	3132	14	81	19	554	15
PhD	1705	8	18	4	109	3
Non-Doctoral	142	0.6	0	0.0	6	0.2
<u>ASSISTANT PROFESSORS</u>						
MD - PhD	152	0.7	4	0.9	138	3.7
MD	4290	19	118	28	1118	30
PhD	2463	11	36	8	155	4
Non-Doctoral	606	3	1	0.2	9	0.2
<u>INSTRUCTORS</u>						
MD - PhD	21	0.1	2	0.5	21	0.6
MD	1152	5	19	4	482	13
PhD	399	1.8	3	0.7	30	0.8
Non-Doctoral	1019	5	2	0.5	8	0.2
<u>LECTURERS & OTHER</u>						
MD - PhD	4	0.0	0	0.0	10	0.3
MD	212	1.0	7	1.6	68	1.8
PhD	215	1.0	1	0.2	44	1.2
Non-Doctoral	338	1.5	1	0.2	15	0.4
TOTAL	22096	(100%)	428	(100%)	3702	(100%)

than do U.S. or foreign trained M.D.'s.

Table 31c compares U.S., Canadian and foreign trained faculty by differences in citizenship, specialty, nature of employment, responsibilities, years of current employment and total number of jobs.

When looking at current citizenship, 61 percent of the Canadian trained faculty and 42 percent of the foreign trained faculty have U.S. citizenship.

The U.S. trained faculty have higher percentages of faculty with internal medicine (18 percent) and surgery (17 percent) specialties than do their non-U.S. trained counterparts. Canadian trained faculty have higher percentages of faculty with psychiatry specialties, while the plurality of foreign trained faculty have Basic Science specialties (19 percent).

U.S. trained faculty have higher percentages of faculty who are part-time (16 percent) than do Canadian or foreign trained faculty, and foreign trained faculty have higher percentages of persons with strict full-time appointments (71 percent) than do the other groups.

When looking at areas of responsibility, each of the groups has similar profiles except for a slightly lower participation rate of foreign trained faculty in teaching activities (12 percent)

TABLE 31c

Demographic and Appointment Characteristics
Of U.S. and Foreign Medical Graduate
Faculty
1973-74

DESCRIPTORS	U.S.	CANADIAN	FOREIGN
	100%	100%	100%
<u>Citizenship</u>			
United States	100	61	42
Canadian	0.1	37	0.6
Other Foreign	0.3	1.7	57
<u>Primary Specialty</u>			
<u>Clinical Sciences</u>			
Anesthesiology	3	5	10
Dermatology	1.4	0.9	0.4
Endocrinology	0.9	1.7	0.6
Family Practice	1.3	1.7	0.5
Internal Medicine	18	11	13
General Medicine	8	3	4
Nuclear Medicine	0.5	1.2	0.6
Neurology	3	4	3
Ob-Gyn	5	4	4
Oncology	0.3	-	0.3
Pathology-Clin	2	2	4
Pediatrics	11	10	10
PM & R	1.1	2	1.9
Public Health & Priv	1.1	2	0.9
Psychiatry	11	14	9
Radiology	6	5	7
Surgery	17	15	10
All Other	0.2	1.2	0.3
<u>Basic Sciences</u>			
All Other	10	16	19
All Other	0.8	0.3	1.0
<u>Nature of Employment</u>			
Strict Full-Time	62	63	71
Geographic Full-Time	22	25	18
Part-Time	16	13	11
<u>Responsibilities</u>			
Full Teaching	7	8	6
Part Teaching	86	83	82
No Teaching	7	9	12
Full Research	1.3	3	4
Part Research	59	63	59
No Research	40	34	36
<u>Years Current Employment</u>			
0-5	49	48	60
6-10	23	26	23
11-15	15	15	12
16-20	6	7	3
21-25	4	2	1.2
26+	3	2	0.6
<u>Total # of Jobs</u>			
1 (Current)	48	45	44
2	30	31	26
3	14	16	16
4	5	4	8
5	2	2	4
6	0.6	1.7	1.4
7	0.3	-	0.5

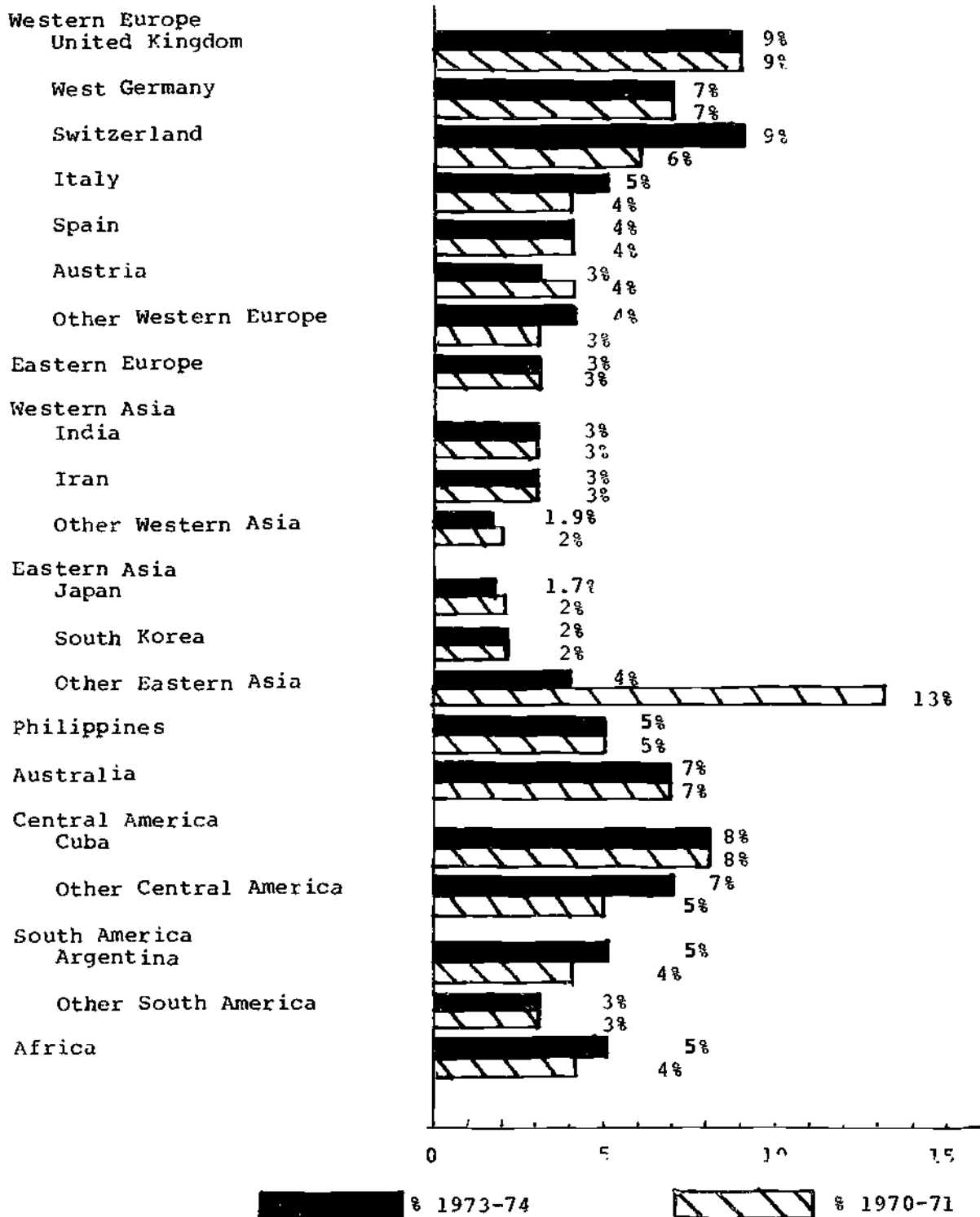
and U.S. trained faculty in research activities (40 percent).

The U.S. and Canadian trained faculty have a similar profile in their years of current employment; however, foreign trained faculty have higher percentages of faculty with less than 6 years of current employment (60 percent) than do the other groups. Foreign trained faculty also have higher percentages of faculty with four or more professional jobs than do Canadian and U.S. trained faculty.

Figure 6 shows the nations that awarded the medical degrees to the foreign trained M.D. faculty at U.S. medical schools. In 1973-74 the greatest source of foreign trained faculty were from the United Kingdom (9 percent), and Switzerland (9 percent) followed by Cuba (8 percent). The 1973-74 profile is quite similar to the 1970-71 profile, except for faculty who were trained in "Other Eastern Asia countries", which dropped from 13 percent in 1970-71 to 4 percent in 1973-74.

FIGURE 6

Distribution By Nation Awarding M.D. Degree
Of Foreign-Educated M.D.'s On Faculty
Of U.S. Medical Schools
1970-71 & 1973-74



Newly Hired Faculty

The faculty new to medical schools in 1973-74 (includes medical school transfers) totaled 2,851 persons, accounting for 11 percent of the total faculty force in that year. In the 1970-71 school year, the new hire total was 2188 persons which was 10 percent of the faculty force that year.

Table 32a shows the newly hired faculty in 1973-74 and 1970-71 by their rank and type of degree. When looking for changes in new faculty since 1970-71, one can note an increase in appointments for the upper ranks and a decrease in appointments at the instructor level. The greatest drop was experienced by new M.D. instructors who represented 43 percent of the M.D.'s hired in 1970-71, and 31 percent in 1973-74.

Table 32b presents characteristics of newly hired faculty in 1973-74 for sex, age, citizenship, country of training, nature of employment, responsibilities, source of original employment, total number of jobs and location of previous employment for each degree type.

One can note that newly hired women represented 18 percent of the new hires in 1973-74. This percentage is slightly higher than their overall representation in the total faculty (Table 29a).

Almost half of the newly hired M.D.'s were thirty to thirty-

TABLE 32a

Newly Hired Medical School
Faculty By Type of Degree
1970-71 & 1973-74

DESCRIPTORS	1973-74					1970-71				
	TOTAL	MD- PhD	MD	PhD	NON- DOCTORAL	TOTAL	MD- PhD	MD	PhD	NON- DOCTORAL
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<u>Rank</u>										
Full Professor	7	15	9	5	0.7	4	22	4	6	1.1
Associate Professor	9	17	10	10	0.7	6	24	5	10	1.0
Assistant Professor	46	50	47	55	14	42	42	43	55	10
Instructor	32	14	31	24	69	40	13	43	22	69
Lecturer & Other	6	4	4	6	16	8	-	6	8	19

TABLE 32b

**Demographic and Appointment
Characteristics of Newly Hired
Medical School Faculty by Type of
Degree
1970-71 & 1973-74**

DESCRIPTORS	1973-74				
	TOTAL	MD-PhD	MD	PhD	NON-DOCTORAL
	100%	100%	100%	100%	100%
<u>Sex</u>					
Male	82	89	89	80	37
Female	18	11	11	20	63
<u>Age</u>					
Below 25	2	0.9	0.2	1.5	16
25-29	23	7	17	37	34
30-34	41	29	46	36	20
35-39	15	37	16	12	10
40-44	8	7	8	7	7
45-49	6	9	6	3	6
50-54	3	4	4	1.7	4
55-59	1.2	1.9	1.3	0.8	1.5
60-64	0.4	0.9	0.4	0.3	0.0
Above 64	0.5	0.9	0.6	0.2	0.7
<u>Nature of Employment</u>					
Strict Full-Time	74	84	68	86	76
Geographic Full-Time	13	10	16	7	8
Part-Time	13	6	15	7	16
<u>Responsibilities</u>					
Full Teaching	5	4	5	4	12
Part Teaching	80	85	86	74	59
Other Activity	14	11	9	22	29
Full Research	6	6	1.6	17	8
Part Research	55	77	53	72	25
Other Activity	39	17	46	12	68
<u>Total # of Jobs</u>					
1 (Current)	34	28	40	27	13
2	32	22	33	32	26
3	16	20	13	19	22
4	10	15	8	12	19
5	5	10	3	6	12
6	2	5	1.0	3	5
7	1.2	0.0	0.8	1.5	3
<u>Country of Training</u>					
U.S.	81	49	77	94	100
Canadian	1.7	3	2	0.9	0.0
Foreign	16	48	21	5	0.8

TABLE 32b (Cont.)

DESCRIPTORS	1973-74				
	TOTAL	MD-PhD	MD	PhD	NON-DOCTORAL
	100%	100%	100%	100%	100%
<u>Source</u>					
<u>Professional Employment:</u>					
Volunteer-Same School	1.3	-	1.6	0.2	1.9
Volunteer-Other School	0.4	0.9	0.6	-	-
Faculty-U.S. Non-Med School	5	1.9	0.8	13	11
Non-Medical School	0.9	1.9	0.1	3	2
Foreign	1.8	6	1.7	2	-
Foreign-Non-Academic	0.4	1.9	0.3	0.3	0.4
Private Practice	5	4	8	0.5	-
U.S. Active Ml Service	5	0.9	7	0.2	0.8
U.S. Government	4	4	5	3	5
U.S. Hosp Non-Federal	3	3	2	2	12
Fdn or Res Inst	0.6	-	0.2	1.4	1.5
U.S. St Loc Government	3	0.9	1.3	2	14
Priv Bus or Ind	0.7	-	0.1	0.9	5
<u>Training:</u>					
U.S. Med School	7	7	6	10	3
U.S. Educ Institution	9	9	0.5	24	26
Intern-Residency	29	34	43	0.8	-
NIH/NIME Trn Program	14	11	12	24	0.8
Other Trn Program	8	11	8	8	6
Other	3	-	1.3	3	11
Unknown	1	3	1.1	0.6	0.8
<u>Previous Employment</u>					
<u>Location:</u>					
Med School Full-Time	27	32	30	26	11
Med School Part-Time	7	7	7	7	5
Other Academic	15	12	2	42	20
Foreign Employment	7	25	7	6	1.3
Private Practice	8	4	14	1.1	0.4
Government Employment	19	9	25	7	20
Other Employment	6	5	4	5	20
Unknown	11	7	11	6	22
<u>Citizenship</u>					
U.S.	83	53	81	88	98
Canada	1.4	4	1.6	0.8	0.4
Foreign	15	43	17	11	1.8

four years of age (46 percent), while the plurality of M.D.-Ph.D.'s were thirty-five to forty years of age (37 percent). One-half of the newly hired faculty with non-doctoral degrees were under thirty years of age.

Over eight out of ten newly hired faculty in 1973-74 were U.S. citizens. However, only 53 percent of newly hired M.D.-Ph.D.'s had a current U.S. citizenship. Furthermore, 48 percent of the newly hired M.D.-Ph.D.'s and 21 percent of the newly hired M.D.'s received their professional preparation in a foreign country. The foreign trained faculty represent 16 percent of the new hires, a percentage about the same as their fraction in the total faculty for 1973-74 (Table 31a).

Eighty-six percent of the new Ph.D.'s and 84 percent of the M.D.-Ph.D.'s were appointed with strict-full-time positions. M.D.'s and non-doctoral faculty had the greatest percentages of faculty who were hired only part-time, 15 percent and 16 percent respectively.

When looking at the areas of responsibility, 91 percent of the new M.D.'s and 89 percent of the new M.D.-Ph.D.'s were involved in teaching activities. However, 29 percent of the newly hired non-doctoral faculty had no teaching assignments.

Forty-six percent of the newly hired M.D.'s had no research responsibilities, a percentage higher than was observed in the

total M.D. faculty force (41 percent no research) in 1973-74. One can also note that 89 percent of the new Ph.D.'s were involved in research, whereas only 33 percent of non-doctoral new hires had research responsibilities.

When looking at the original source or activity of faculty prior to the time of first medical school appointment, one can note that the plurality of M.D.-Ph.D.'s (34 percent) and M.D.'s (43 percent) came directly from an internship or residency. Almost 50 percent of the Ph.D.'s came from U.S. educational institutions or NIH/NIMH training programs. However, over half of the non-doctoral faculty originally came from other employment.

This is consistent with the total number of jobs by type of degree. Only 13 percent of the newly hired non-doctoral faculty are in their first professional job compared to 40 percent of the newly hired M.D.'s.

When looking at the previous employment locations of the newly hired faculty who came from other employment, the plurality of M.D.-Ph.D.'s and M.D.'s came from full-time positions at other medical schools, 32 percent and 30 percent respectively. However, another 25 percent of the M.D.-Ph.D.'s came from foreign employment, while 25 percent of the M.D.'s had U.S. government positions.

The plurality of Ph.D.'s (42 percent) transferred from non-medical academic institutions, but also had a large percentage transfer full-time positions to another medical school (26 percent).

FOOTNOTES

¹The data used for the 1973-74 faculty estimates were obtained by "rolling back" the July 1975 master file to January 1974. All faculty who had salaried appointments at that time were included in the study.

²The data used for the 1970-71 faculty estimates came from the computer tapes used in the AAMC Faculty Mobility Series Report 1. Anderson, Philip W., and Larson, Thomas. Mobility Characteristics of U.S. Medical School Faculty In 1971. AAMC Faculty Mobility Series, Report 1. DHEW Publication No. (HRA) 75-70. Washington, D.C. That report noted (page 9) that 90 percent of faculty were employed in academic medicine in both calendar 1970-1971. The other 10 percent were newly hired in 1971.

APPENDIX A
FACULTY ROSTER QUESTIONNAIRE

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

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

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

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

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

76. OPTIONAL INFORMATION
[]
(For school use only)

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)

- 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

CURRENT APPOINTMENT DATA:

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

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

13. JOINT DEPARTMENT _____ 14. JOINT DEPT. ACADEMIC RANK _____
(If No Joint Dept., Enter "NONE")

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
- MS - 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.

<p>NAME (Surname) _____ (First) _____ (Middle Initial or Name) _____</p> <p>DEPARTMENT _____</p>	<p>16. _____ 16A. _____</p>								
	<p>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.</p> <p><input type="checkbox"/> TEACHING <input type="checkbox"/> RESEARCH <input type="checkbox"/> PATIENT CARE <input type="checkbox"/> ADMINISTRATION <input type="checkbox"/> OTHER</p>								
	<p>18. NATURE OF EMPLOYMENT: (Check one)</p> <table border="0"><tr><td><input type="checkbox"/> SFT Strict full-time in medical school</td><td><input type="checkbox"/> SFTA Strict full-time in affiliated institution*</td></tr><tr><td><input type="checkbox"/> GFT Geographic full-time in medical school</td><td><input type="checkbox"/> GFTA Geographic full-time in affiliated institution*</td></tr><tr><td><input type="checkbox"/> PTS Part-time salaried in medical school</td><td><input type="checkbox"/> PTSA Part-time salaried in affiliated institution*</td></tr><tr><td><input type="checkbox"/> NS Non salaried</td><td>* (Usually teaching hospitals)</td></tr></table>	<input type="checkbox"/> SFT Strict full-time in medical school	<input type="checkbox"/> SFTA Strict full-time in affiliated institution*	<input type="checkbox"/> GFT Geographic full-time in medical school	<input type="checkbox"/> GFTA Geographic full-time in affiliated institution*	<input type="checkbox"/> PTS Part-time salaried in medical school	<input type="checkbox"/> PTSA Part-time salaried in affiliated institution*	<input type="checkbox"/> NS Non salaried	* (Usually teaching hospitals)
	<input type="checkbox"/> SFT Strict full-time in medical school	<input type="checkbox"/> SFTA Strict full-time in affiliated institution*							
<input type="checkbox"/> GFT Geographic full-time in medical school	<input type="checkbox"/> GFTA Geographic full-time in affiliated institution*								
<input type="checkbox"/> PTS Part-time salaried in medical school	<input type="checkbox"/> PTSA Part-time salaried in affiliated institution*								
<input type="checkbox"/> NS Non salaried	* (Usually teaching hospitals)								
<p>18A. If Nature of Employment is SFTA, GFTA, or PTSA (See Item 18) enter name of affiliated institution _____</p>									
<p>19A. Beginning Month and Year of current employment as a salaried faculty member at this school _____</p>									

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

	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)
M.D. D.O. OR FOREIGN EQUIVALENT	30	MEDICINE			
PH.D. OR EQUIVALENT	31				
OTHER HEALTH RELATED DOCTORATE	37				
M.A./M.S.	33				
BACHELORS	34				

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

INTERNSHIPS IN THE U.S.A.		HOSPITAL	CITY	STATE	YEAR COMPLETED
		(a)			(b)
36 NONE <input type="checkbox"/>	37				
	38				

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

U.S. MEDICAL SPECIALTY BOARD CERTIFICATION: 45 NONE

45 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**
- 01 Complete Degree *
 - 02 Complete Additional Doctorate *
 - 03 Specialty Training
 - 04 Training Only
 - 05 Teaching Only
 - 06 Training & Research
 - 07 Teaching & Research
 - 08 Training & Teaching
 - 09 Training, Teaching, & Research

SOURCE OF AWARD

- Abbreviations**
- 11 NIH National Institutes of Health
 - 12 PHS Other Public Health Service
 - 15 CP&EHS Consumer Protection & Environmental Health Service
 - 14 HSMHA Health Services & Mental Health Admin. (incl. NIMH)
 - 16 ERS Social Rehabilitation Service
 - 17 SSA Social Security Admin.
 - 13 OE Office of Education
 - 13 OHEV-Other All other Dept. Health, Education & Welfare

Abbreviations

- 24 NSF National Science Foundation
- 23 VA Veterans Administration
- 25 FED-Other Federal-Other
- 46 ACAD Academic
- 45 ACAD-F Academic Foreign
- 35 FOR Foreign
- 38 FDN Foreign Society, Association
- 37 IND Individual
- 50 A.I. Please specify

*Use for Pre-doctoral only.

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

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

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

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

76

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

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

68 NONE <input type="checkbox"/>	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)
69								
70								
71								
72								
73								

FEDERAL AGENCY (From Which Funds Are Received)

<u>Abbreviations</u>	
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.
12 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)

<u>Abbreviations</u>	
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

05

APPENDIX B
MEDICAL SCHOOLS INCLUDED IN STUDY

Appendix B

1. University of Alabama
2. University of South Alabama
3. University of Arizona
4. University of Arkansas
5. University of Southern California
6. Stanford University
7. Loma Linda University
8. University of California, Los Angeles
9. University of California, Irvine
10. University of California, Davis
11. Yale University
12. University of Connecticut
13. University of Florida
14. University of South Florida
15. Florida State University
16. Medical College of Georgia
17. Emory University
18. University of Hawaii
19. University of Chicago
20. University of Illinois
21. University of Health Sciencec, Chicago
22. Loyola University of Chicago
23. Southern Illinois University
24. Indiana University
25. University of Iowa
26. University of Kansas
27. University of Louisville
28. University of Kentucky
29. Tulane University
30. Louisiana State University, New Orleans
31. Louisiana State University, Shreveport
32. University of Maryland
33. Johns Hopkins University
34. University of Massachusetts
35. Harvard Medical School
36. University of Michigan
37. Wayne State University
38. Michigan State University
39. University of Minnesota, Minneapolis
40. University of Minnesota, Duluth
41. University of Mississippi
42. University of Missouri, Columbia
43. University of Nebraska
44. Creighton University
45. University of New Mexico
46. Columbia University
47. State University of New York, Buffalo
48. State University of New York, Upstate
49. New York University
50. New York Medical College

51. University of Rochester
52. Einstein College of Medicine
53. University of North Carolina
54. Broman Gray School of Medicine
55. Duke University
56. University of North Dakota
57. Ohio State University
58. University of Oklahoma
59. University of Oregon
60. University of Pennsylvania
61. Medical College of Pennsylvania
62. University of Pittsburgh
63. Pennsylvania State University
64. University of Puerto Rico
65. Medical University of South Carolina
66. Vanderbilt University
67. Meharry Medical College
68. Baylor College of Medicine
69. University of Texas, Dallas Southwestern
70. University of Texas, San Antonio
71. University of Texas, Houston
72. Texas Tech University
73. University of Vermont
74. University of Virginia
75. Eastern Virginia Medical School
76. West Virginia University
77. University of Wisconsin

Studies in Medical Education

Anderson, P. Descriptive Study of Salaried Medical School Faculty. December, 1975.

Johnson, D.G. and Dube, W.F. Descriptive Study of Medical School Applicants, 1974-75. December, 1975.

Lambdin, J.A. Survey of How Medical Students Finance Their Education, 1974-75. December, 1975.

Nunn, R. and Lain, L. Classification of Medical Education Institutions. December, 1975.

Rosenthal, J. Medical School Programs, Resources and Financing.

Sedlacek, W.E. Variables Related to Increases in Medical School Class Size. December, 1975.

Sherman, C. Study of Medical Education: Interrelationships Between Component Variables. December, 1975.

Additional copies of these publications may be obtained from:

Association of American Medical Colleges
Attention: Membership and Subscriptions
1 Dupont Circle N.W.
Washington, D.C. 20036