DOCUMENT RESUME

ED 087 375 HE 005 207

TITLE	Profiles of U. S. Medical School Faculty, Fiscal Year 1971. Resources Analysis Memo No. 13, October 1972.
INSTITUTION	National Institutes of Health (DHEW), Bethesda, Md. Resources Analysis Branch.
REPORT NO	Memo-13
PUB DATE	Oct 72
NOTE	18p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*College Faculty; *Higher Education; *Medical Education; *Medical Schools; Research Projects; Statistical Data; *Teacher Characteristics

ABSTRACT

This publication presents a series of national profiles of salaried medical school faculty. It covers the faculty's demographic characteristics, major areas of professional activity, recent employment history, sources of recruitment, and volunteer service. (Author)

RESOURCES ANALYSIS

Memo No. 13

Profiles of U.S. Medical School Faculty
Fiscal Year 1971

**Profiles of U.S. Medical School Faculty
Fiscal Year 1971**

This publication presents a series of national profiles of salaried medical school faculty. It covers the faculty's demographic characteristics, major areas of professional activity, recent employment history, sources of recruitment, and volunteer service. This summary will be followed by an in-depth medical school faculty report and an extensive set of basic reference tables covering these and other items in greater detail. It is expected that the information contained in these publications will be of significant value to those responsible for monitoring the biomedical, scientific, and professional manpower scene and for future program planning.

Data for these publications were derived from the roster of full- and part-time salaried medical school faculty maintained by the Association of American Medical Colleges (AAMC) under contract with the National Institutes of Health (NIH).

This analysis was prepared under the direction of Dr. Herbert H. Rosenberg, Director, Office of Resources Analysis, Mr. Wayne E. Tolliver, Chief, Manpower Analysis Branch, was responsible for the development and preparation of the report. Mrs. Carol M. Brown and Mrs. Dorothy F. Boykin assisted in the preparation of the report.

The Nation's medical colleges confront a steeply rising demand for faculty stemming from (1) the expansion of existing medical schools and the establishment of new schools, and (2) the extension in the scope of the traditional triad of education, research, and service. In the past decade, the number of full-time medical school faculty increased more than 128 percent—from 11,200 in Fiscal Year 1961 to 25,591[1] in Fiscal Year 1971. The AAMC and the NIH, in recognition of the growing problems in staffing the medical schools, instituted a medical school faculty roster project in 1966 to keep abreast of trends in faculty status, staffing patterns, and faculty activities. This publication presents selected highlights from the Fiscal Year 1971 faculty roster.

[1] Excludes 2,861 part-time salaried faculty.

Office of Resources Analysis, Office of Associate Director for Program Planning and Evaluation
National Institutes of Health

October 1972

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

DISTRIBUTION OF FACULTY

Distribution of Total Faculty—Table 1.

The 28,452 full- and part-time salaried medical school faculty included in the Fiscal Year 1971 universe were distributed as follows: 51 percent in public medical schools and 49 percent in private schools; 96 percent in 4-year accredited medical schools, 2 percent in 2-year schools of basic medical sciences, and 2 percent in developing medical schools; 23 percent were professors, 23 percent associate professors, 34 percent assistant professors, 14 percent instructors, and 6 percent below the rank of instructor; 90 percent had full-time faculty appointments, and 10 percent had part-time appointments; 25 percent were biological scientists, 60 percent had clinical specialties, and 14 percent had other specialties.

Distribution by Sex—Table 1.

The medical school faculty were predominantly male—86 percent men and 14 percent women. The same proportions were in evidence for private and public medical schools, 4-year medical schools, and schools of basic medical sciences. In certain categories, men accounted for a significantly higher percentage of the total faculty—91 percent of the faculty in developing medical schools, 96 percent of the professors, 91 percent of the associate professors, 90 percent of the clinical specialists, and 91 percent of the mathematical and physical scientists. There were fewer women than men in every category except allied health where women accounted for 55 percent and men for 45 percent. Thirty-six percent of the behavioral sciences faculty were women. There was a relatively low percentage of women in the higher academic ranks.

Distribution by Citizenship—Table 1.

Nine-tenths (91 percent) of the medical school faculty were U.S. citizens, and 9 percent were foreign. These foreign citizens were very much in evidence in the lowest academic ranks where they ranged from 15 to 20 percent of the total. A significantly higher than average percentage of foreign citizens also appeared in the schools of basic medical sciences, biological science specialties, and private medical schools.

If the location of training is considered, rather than citizenship, the data show that 84 percent of the full-time medical school faculty were trained in the United States, and 16 percent were trained in foreign countries. The percentages trained in the United States and in foreign countries varied significantly according to the type of earned degree—M.D.'s, 82 percent and 18 percent, respectively; Ph. D.'s, 92 percent and 8 percent; and for those with both degrees, 64 percent and 36 percent.

Distribution by Type of Degree—Table 1A.

Faculty with the M.D. degree—Fifty-nine percent of the medical school faculty were M.D.'s—56 percent in public medical schools and 63 percent in private schools. Four-year medical schools had the highest percentage of M.D.'s on their faculty—60 percent compared to 38 percent in schools of basic medical sciences and 46 percent in developing medical schools. The M.D.'s were well represented among the highest academic ranks—62 percent of the professors and 63 percent of the associate professors, as compared with 60 percent of the assistant professors and 55 percent of the instructors. The percentage of M.D.'s dropped sharply below the rank of instructor. Only one-half of the strict full-time faculty were M.D.'s; whereas, approximately three-fourths of the other full- and part-time faculty were M.D.'s. The lion's share of M.D.'s reported a clinical specialty: however, M.D.'s were very much in evidence in the biological sciences as well. More specifically, 86 percent of the clinical specialists, 17 percent of the biological specialists, and 3 to 5 percent of the specialists in other fields were M.D.'s.

Faculty with the Ph. D. degree—Ph. D.'s represented twenty-five percent of the medical school faculty—27 percent in public medical schools and 23 percent in private schools. Schools of basic medical sciences had the highest percentage of Ph. D.'s—45 percent compared to 37 percent in developing medical schools and 24 percent in 4-year medical schools. Most of the Ph. D.'s were in the intermediate and top academic ranks—25 percent were professors, 25 percent associate professors, and 38 percent assistant professors. Nearly one-third (32 percent) of the strict full-time faculty were Ph. D.'s compared to only one-tenth of the part-time faculty. From 60 to 70 percent of the total scientists and 5 percent of the clinical specialists were Ph. D.'s.

Faculty with the M.D. plus Ph. D. degree—Five percent of the faculty had earned the M.D. plus Ph. D. degree. These members were most prominently represented on the faculties of developing medical schools and schools of basic medical sciences, among professor and associate professor ranks, and in the biological sciences.

Faculty without the M.D. or Ph. D. degree—Ten percent of the faculty had not earned the M.D. or Ph. D. degree. They were most frequently reported in the lowest academic ranks and non-biological and clinical specialties such as allied health (including nursing, library science, and audiology and speech therapy), behavioral sciences, mathematics, physical sciences, and engineering.

MAJOR AREAS OF FACULTY ACTIVITY

Number of Faculty Activities by Type of Degree—Table 2.

More than eight-tenths (84 percent) of the medical school faculty performed multiple functions. In fact, the average faculty member had been assigned 2.4 major areas of activity by his medical school—2.6 for faculty with the M.D., 2.1 for Ph. D.'s, and 2.6 for faculty who had earned both degrees. While two-thirds of the M.D.'s averaged between two and three major areas of activity, 57 percent were involved in three or more activities, 30 percent in two activities, and only 13 percent reported one activity. More than five-sixths (84 percent) of the Ph. D.'s had two or more major areas of activity, and about one-sixth (16 percent) engaged in one activity. The pattern for those who had earned both degrees displayed the tendencies of both the M.D. and Ph. D. types—13 percent had one major area of activity, 35 percent had two, 35 percent had three, 16 percent had four, and one percent had five.

Faculty Activity by Type of Degree.

Faculty with the M.D. degree—Chart 1. As previously noted, the average M.D. on the medical school faculty had been assigned 2.6 major areas of activity. Practically all of them (93 percent) were teaching, approximately two-thirds (62 percent) were in research, seven-tenths (71 percent) were in service activities, 35 percent had administrative responsibilities,[2] and 3 percent performed other activities.

Faculty with the Ph. D. degree—Chart 1A. The average Ph. D. on the medical school faculty had 2.1 major areas of activity. Approximately nine-tenths (86 percent) were teaching, nine-tenths (89 percent) were in research, nearly one-fifth (18 percent) were in service activities, one-fifth (20 percent) had administrative responsibilities,[2] and one percent were in other activities.

Faculty with the M.D. plus the Ph. D. degree—Chart 1B. These faculty, like the M.D.'s, had an average of 2.6 major areas of activity. Similarly, nine-tenths (90 percent) were teaching. However, more than 85 percent were in research compared with 62 percent for M.D.'s only. Nearly one-half (45 percent) were in service activities, one-third (33 percent) had administrative responsibilites,[2] and 2 percent were in other activities.

Activity Patterns of Strict and Geographic Full-time M.D.'s and Ph. D.'s—Table 3.

The average geographic full-time faculty member had more major areas of activity than the strict full-time member. Geographic full-time faculty with the M.D. degree were assigned an average of 2.8 major activities compared to 2.7 for strict full-time members. For Ph. D.'s, the averages were 2.3 and 2.1, respectively. These differences are attributable to the fact that a larger percentage of geographic full-time M.D.'s than Ph. D.'s were involved in three of the five major areas of activity—teaching, service, and administration. These differences, barely discernible in the aggregate, become more meaningful at the sub-specialty level of detail.

Activity Patterns of Men and Women—Chart 2.

Men on the medical school faculty outnumbered women 6 to 1. They also had a higher average number of major areas of activity. The average for men was 2.5 compared to 2.1 for women. The difference in average number of major areas of activity is reflected in a higher percentage of men involved in teaching, research, and administration than women and approximately the same percentage of men and women involved in service activities. More specifically, the percentage of involvement by activity for men and women shows that: 86 percent of the men were teaching compared to 76 percent of the women, 67 percent of the men were in research compared to 49 percent of the women, 31 percent of the men were in administration compared to 21 percent of the women, and 52 percent of the men were in service activities compared to 53 percent of the women.

Basic Specialties of Men and Women—Table 4.

Among the broad basic specialties, 88 to 91 percent of the faculty were men in the basic sciences, clinical specialties, mathematics, physical sciences, engineering, and administration. In 13 of the fine fields, men accounted for more than 90 percent of the faculty. These fields were biophysics, pharmacology, dermatology, internal medicine, medicine, nuclear medicine, neurology, obstetrics and gynecology, oncology, radiology, surgery, and administration.

There were more women in the clinical specialties and basic sciences than any other specialty group; however, they represented only 10 to 12 percent of the respective totals for these fields. The proportion of women was significantly higher in allied health and the behavioral sciences where they accounted for 55 and 36 percent, respectively. Most women classified under allied health were in nursing, library science, audiology and speech therapy, and medical illustration, while in the behavioral sciences they were in social work and psychology.

[2] Excludes non-faculty administrators.

MEDICAL SCHOOL EMPLOYMENT PATTERNS

Number of Medical Schools of Employment by Type of Earned Degree—Table 5.

More than eight-tenths (82 percent) of those on the faculty during Fiscal Year 1971 had been employed by only one medical school during the preceding 10 years. Of those employed 10 or more years, 77 percent were employed by only one medical school compared to 85 percent for those employed less than 10 years. Data for faculty with the M.D. or Ph. D. degree were nearly identical to that of the total faculty. However, the mobility rate was much higher for those who had earned both degrees, and lower for those who had not earned either degree. Nineteen percent of the faculty who had earned the M.D. or Ph. D. degree had been employed by two or more medical schools compared to 25 percent for those who had not earned either degree.

Academic Rank Related to Number of Medical Schools of Employment—Table 6.

Those faculty who changed schools most often between December 1961 and the end of Fiscal Year 1971 were more likely to be in the top academic ranks than those who changed less frequently. Table 6 shows that 40 percent of the faculty who had been employed by four or more medical schools were professors in Fiscal Year 1971 compared to only 22 percent for those who remained at the same school. At the lower end of the academic ladder, only 5 percent of the faculty employed by four or more medical schools were instructors compared to 16 percent for those who remained with one medical school. This observation also applies to faculty whose total period of employment extended over a period of 10 or more years and for those whose total employment was less than 10 years.

SOURCES OF RECRUITMENT

In Fiscal Year 1971, more than seven-tenths (71 percent) of the faculty stated that they had originally entered medical school employment directly from a training program—Table 7. As expected, the sources of recruitment varied widely by faculty degree types. The data showed that two-thirds of the M.D.'s came directly from medical school or residency training, more than three-fourths of the Ph. D.'s came from medical or non-medical school training programs, and three-fourths of those with the M.D. plus Ph. D. came from medical school, residency, or non-medical school training. Twenty-three percent of the M.D.'s on the medical school faculty in Fiscal Year 1971 were employed by the same school that conferred their M.D. degree, and 41 percent were employed by the medical school responsible for their residency training. In sharp contrast, less than 4 percent of the Ph. D.'s and other non-M.D.'s on the medical school faculty were employed by the school that conferred their last degree.

Specifically, seven-tenths (71 percent) of the M.D.'s had originally entered medical school employment from a training program. This was the smallest percentage reported for any of the doctoral degree groups. Among M.D.'s recruited from training programs, 40 percent came from residency training, 27 percent from medical school training, and 4 percent from non-medical schools. The Ph. D.'s had the highest percentage (79 percent) originally entering medical school employment from a training program—43 percent from non-medical school training and 35 percent from medical school training programs. Three-fourths (75 percent) of the faculty with an M.D. plus Ph. D. degree originally entered medical school employment from a training program—34 percent from medical school training, 27 percent from a residency, and 14 percent from a non-medical school.

Approximately 30 percent of the faculty originally entered medical school employment from other employment. Among the M.D. faculty, 11 percent came from private practice, 9 percent from the Federal Government, 2 percent from State and local government, and 7 percent from other employment sources. Among the Ph. D.'s, 6 percent came from the Federal Government, 3 percent from State and local government, 1 percent from private practice, and 12 percent from other employment. Among those with the M.D. plus Ph. D. degree, 7 percent came from the Federal Government, 5 percent from private practice, 2 percent from State and local government, and 11 percent from other employment.

DISTRIBUTION OF SPECIALTIES BY DOCTORAL TYPES

Traditionally, we would expect faculty with research doctorate degrees such as the Ph. D. to be in science fields, and those with professional doctorate degrees such as the M.D. to be in clinical or other professional fields. However, these data showed that there was a substantial crossover in medical schools—Table 8.

Nearly one-fifth (18 percent) of the doctoral faculty in the basic medical sciences were M.D.'s, 73 percent Ph. D.'s, and 9 percent had both degrees. Within the basic medical sciences, M.D.'s accounted for a sub-

stantial proportion of the total in several fields—immunology, 34 percent; nutrition, 34 percent; genetics, 30 percent; physiology, 24 percent; general biology, 23 percent; and pharmacology, 22 percent.

In clinical specialties, 89 percent of the doctoral faculty were M.D.'s, 5 percent Ph. D.'s, and 6 percent had both degrees. Clinical fields showing a large proportion of Ph. D.'s were: nuclear medicine, 34 percent; endocrinology, 26 percent; public health and preventive medicine, 17 percent; and oncology, 10 percent.

The doctoral distribution for other disciplines showed that 95 percent of the behavioral scientists were Ph. D.'s, 4 percent M.D.'s, and more than one percent had both degrees. In the combined fields of mathematics, physical sciences, and engineering, 87 percent were Ph. D.'s, 8 percent M.D.'s, and 6 percent had both degrees. In allied health, 83 percent of the faculty were Ph. D.'s, 12 percent M.D.'s, and 5 percent had both degrees.

Administration was listed as a specialty by approximately 1 percent of the doctoral faculty—57 percent of those in administration were M.D.'s, 39 percent were Ph. D.'s, and 4 percent had both degrees.

VOLUNTEER SERVICE

Approximately 3,100, or one-fifth (19 percent), of the M.D.'s[3] on the medical school faculty in Fiscal Year 1971 reported prior service as volunteer, nonsalaried faculty. Of those with full-time faculty appointments, 2,300 M.D.'s—one-sixth (17 percent) of the total—reported prior service as volunteer, nonsalaried faculty. An additional 700 M.D.'s—one-third (17 percent) of those with part-time appointments—also reported prior service as volunteer faculty. By citizenship, 20 percent of the M.D.'s who served as volunteer faculty were U.S. citizens and 13 percent were foreign.

COVERAGE

This publication is based upon data derived from the roster of full- and part-time, salaried medical school faculty maintained by the Association of American Medical Colleges (AAMC) under contract with the National Institutes of Health (NIH).

The 1970–71 faculty survey universe consisted of 103 medical schools, 87 M.D.-granting institutions, 6 schools of basic medical sciences, 8 operational developing medical schools, and 2 developing schools which were not yet operational. The response to the survey was higher in 1970–71 than in any previous year—100 percent reporting for all departments by 75 schools, fairly complete reporting by 27 schools, and only one school that did not report any data.

The data base includes 40,951 faculty—30,960 active faculty (28,099 full-time and 2,861 part-time) and 9,991 inactive faculty. This publication is based upon data from 28,452 active faculty records (25,591 full-time faculty whose records were updated in 1970–71 and 2,861 part-time faculty). Part-time faculty data were collected for the first time during 1970–71. Records for 2,508 faculty in the active file, or approximately 8 percent, were not updated. They are excluded from this publication because their true status was not known. Furthermore, the questionnaire had been revised, and their status with respect to the revisions was not known.

[3] Excludes 2,557 M.D.'s, or 14 percent, who did not respond to the question on volunteer service.

Table 1—Employment Characteristics of Medical School Faculty, by Sex and Citizenship: Fiscal Year 1971

Total faculty = 28,452

Employment characteristics	Personal characteristics—percentage distribution					
	Total [1]		Sex		Citizenship	
	Vertical	Horizontal	Men	Women	U.S.	Foreign
TOTAL	100	100	86	14	91	9
INSTITUTIONAL CONTROL:						
Public	51	100	86	14	92	8
Private	49	100	85	15	89	11
TYPE OF SCHOOL:						
Medical schools	96	100	86	14	91	9
Schools of basic medical sciences	2	100	86	14	87	13
Developing medical schools	2	100	91	9	93	7
ACADEMIC RANK:						
Professors	23	100	96	4	96	4
Associate professors	23	100	91	9	93	7
Assistant professors	34	100	84	16	88	12
Instructors	14	100	69	31	85	15
Associates	3	100	68	32	84	16
Assistants	(2)	100	61	39	80	20
Lecturers	(2)	100	63	37	96	4
No academic rank	1	100	88	12	98	2
EMPLOYMENT STATUS:						
Full-time, total	90	100	86	14	90	10
Strict full-time	62	100	85	15	89	11
Strict full-time affiliated	7	100	85	15	89	11
Geographic full-time	14	100	90	10	93	7
Geographic full-time affiliated	3	100	85	15	91	9
Full-time (type not known)	4	100	87	13	88	12
Part-time	10	100	83	17	96	4
BASIC SPECIALTY:						
Biological sciences	25	100	88	12	88	12
Clinical specialties	60	100	90	10	90	10
Math., phy. sci., and engineering	2	100	91	9	90	10
Behavioral sciences	5	100	64	36	98	2
Allied health	3	100	45	55	96	4
All other	4	100	83	17	92	8

[1] Percentages may not add to 100 due to rounding.
[2] Less than 0.5 percent.

Table 1A—Employment Characteristics of Medical School Faculty, by Type of Earned Degree: Fiscal Year 1971

Total faculty = 28,452

Employment characteristics	Type of degree—percentage distribution						
	Total [1]		M.D.	Ph. D.	M.D. plus Ph. D.	Other degree	None reported
	Vertical	Horizontal					
TOTAL	100	100	59	25	5	10	1
INSTITUTIONAL CONTROL:							
Public	51	100	56	27	5	11	1
Private	49	100	63	23	5	8	1
TYPE OF SCHOOL:							
Medical schools	96	100	60	24	5	10	1
Schools of basic medical sciences	2	100	38	45	7	9	(2)
Developing medical schools	2	100	46	37	9	4	4
ACADEMIC RANK:							
Professors	23	100	62	26	10	2	(2)
Associate professors	23	100	63	27	6	3	(2)
Assistant professors	34	100	60	28	4	7	1
Instructors	14	100	55	13	2	28	2
Associates	3	100	36	28	3	30	3
Assistants	(2)	100	25	28	2	42	3
Lecturers	(2)	100	22	30	4	42	2
No academic rank	1	100	60	14	5	21	(2)
EMPLOYMENT STATUS:							
Full-time, total	90	100	57	27	6	9	1
Strict full-time	62	100	50	32	6	11	1
Strict full-time affiliated	7	100	72	15	5	7	1
Geographic full-time	14	100	75	14	5	5	(2)
Geographic full-time affiliated	3	100	74	14	5	6	1
Full-time (type not known)	4	100	61	21	6	9	2
Part-time	10	100	79	10	3	7	1
BASIC SPECIALTY:							
Biological sciences	25	100	17	70	9	3	(2)
Clinical specialties	60	100	86	5	6	3	(2)
Math., phy. sci., and engineering	2	100	5	60	4	29	2
Behavioral sciences	5	100	2	63	1	34	(2)
Allied health	3	100	3	21	1	71	4
All other	4	100	40	24	3	28	4

[1] Percentages may not add to 100 due to rounding.
[2] Less than 0.5 percent.

Table 1B—Academic Rank of Medical School Faculty, by Type of Earned Degree: Fiscal Year 1971

Total faculty = 28,452

Academic rank	Total	Type of degree				
		M.D.	Ph. D.	M.D. plus Ph. D.	Other	None reported
	Number of faculty					
Total	[1] 28, 151	16, 744	7, 075	1, 536	2, 581	215
Professors	6, 632	4, 117	1, 758	648	95	14
Associate professors	6, 480	4, 072	1, 781	394	203	30
Assistant professors	9, 576	5, 769	2, 668	383	696	60
Instructors	4, 064	2, 239	515	66	1, 163	81
Associates	850	307	240	24	255	24
Assistants	117	29	33	2	50	3
Lecturers	128	28	38	5	55	2
No academic rank	304	183	42	14	64	1
	Vertical percentage					
Total	[2] 100	[2] 100	[2] 100	[2] 100	[2] 100	[2] 100
Professors	23	25	25	42	4	7
Associate professors	23	24	25	26	8	14
Assistant professors	34	34	38	25	27	28
Instructors	14	13	7	4	45	37
Associates	3	2	3	2	10	11
Assistants	([3])	([3])	([3])	([3])	2	1
Lecturers	([3])	([3])	1	([3])	2	1
No academic rank	1	1	1	1	2	([3])

[1] Excludes 301 faculty, or 1 percent, whose rank was not reported.
[2] Percents may not add to 100 due to rounding.
[3] Less than 0.5 percent.

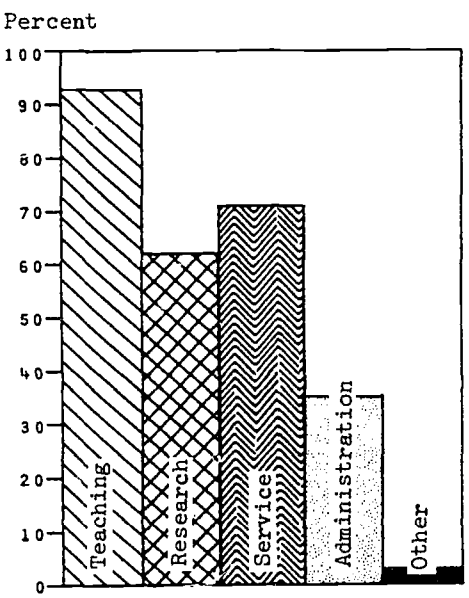
Table 2—Number of Major Areas of Medical School Faculty Activities, by Type of Earned Degree: Fiscal Year 1971

Total faculty = 28,452

Major areas of activity	Total	Type of earned degree		
		M.D.	Ph. D.	M.D. plus Ph. D.
	Number of faculty			
Total faculty [1]	27, 150	16, 095	6, 869	1, 477
Number of activities	66, 136	42, 411	14, 690	3, 781
One	4, 473	2, 130	1, 116	192
Two	10, 372	4, 857	4, 036	516
Three	8, 466	5, 988	1, 390	523
Four	3, 674	3, 003	303	236
Five	165	117	24	10
Average number of activities	2.4	2.6	2.1	2.6
	Vertical percentage			
Total faculty	100	100	100	100
Number of activities:				
One	16	13	16	13
Two	38	30	59	35
Three	31	37	20	35
Four	14	19	4	16
Five	1	1	(2)	1

[1] Excludes 1,302 faculty (5 percent) whose major areas of activity were not reported.
[2] Less than 0.5 percent.

Chart 1—Distribution of Major Activities of the 16,898[1] M.D.'s on the Medical School Faculty: Fiscal Year 1971

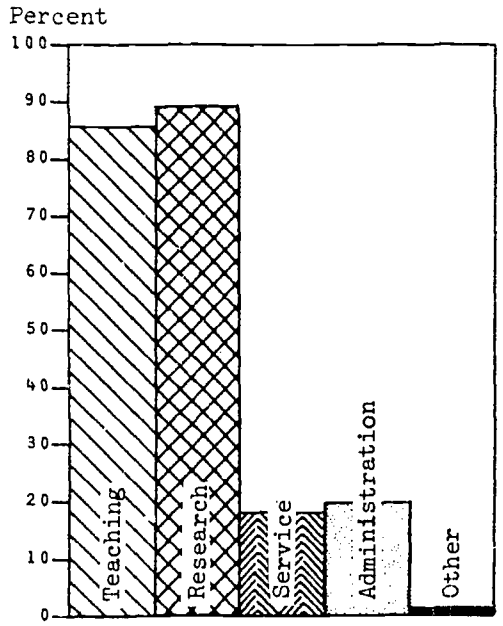


Activities	Total number	Percent of total	
		Activities	Faculty
Total faculty	[2] 16, 095	—	100
Total activities	42, 411	100	—
Teaching	14, 984	35	93
Research	9, 933	23	62
Service	11, 432	27	71
Administration	5, 636	13	35
Other	426	1	3

2.6 ← Average number activities
16, 095/42, 411
↑ ↑ Number activities
Number faculty

[1] Includes 14,633 full-time and 2,265 part-time salaried faculty.
[2] Excludes 803 M.D.'s (5 percent) whose activities were not reported.

Chart 1A—Distribution of Major Activities of the 7,122 [1] Ph. D.'s on the Medical School Faculty: Fiscal Yea, 1971



Activities	Total number	Percent of total	
		Activities	Faculty
Total faculty	[2] 6, 869	—	100
Total activities	14, 690	100	-
Teaching	5, 893	40	86
Research	6, 108	42	89
Service	1, 247	8	18
Administration	1, 349	9	20
Other	93	1	1

2.1← Average number activities

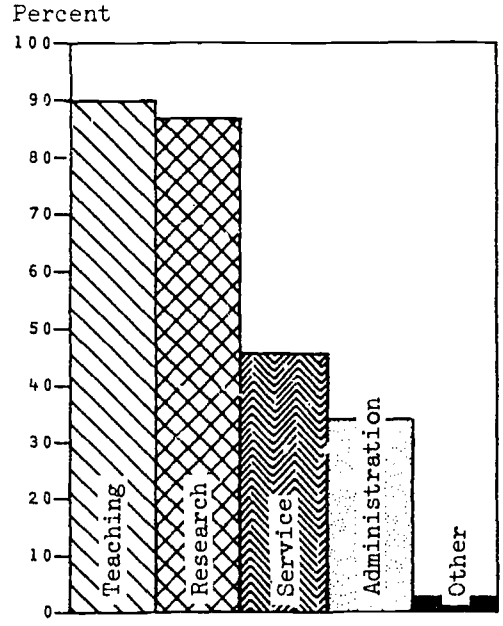
6, 869/14, 690

↑ ↑ Number activities

Number faculty

[1] Includes 6,828 full-time and 294 part-time salaried faculty.
[2] Excludes 253 Ph. D.'s (4 percent) whose activities were not reported.

Chart 1B—Distribution of Major Activities of the 1,547 [1] Medical School Faculty Who Had Earned the M.D. and Ph. D. Degree: Fiscal Year 1971



Activities	Total number	Percent of total	
		Activities	Faculty
Total faculty	[2] 1, 477	—	100
Total activities	3, 781	100	—
Teaching	1, 327	35	90
Research	1, 273	34	86
Service	664	18	45
Administration	492	13	33
Other	25	1	2

2.6← Average number activities

1, 477/3, 781

↑ ↑ Number activities

Number faculty

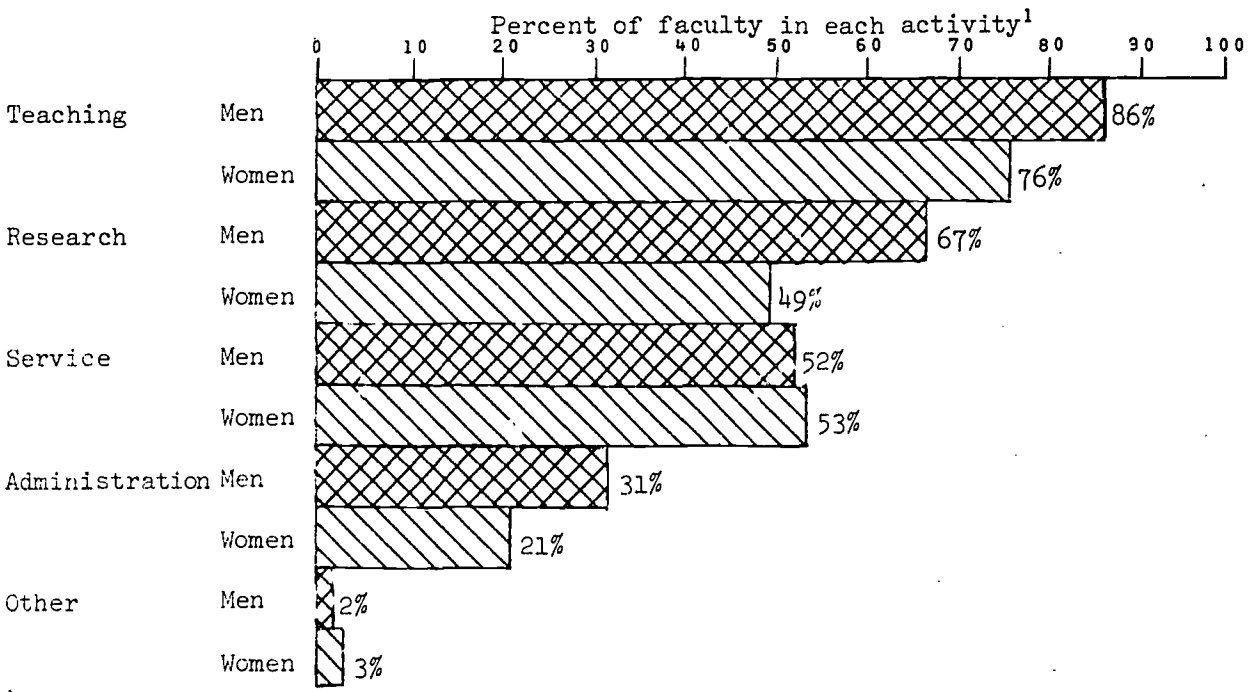
[1] Includes 1,475 full-time and 72 part-time salaried faculty.
[2] Excludes 80 M.D./Ph. D. faculty (5 percent) whose activities were not reported.

Table 3—Activity Patterns of Strict Full-time and Geographic Full-time M.D. and Ph. D. Medical School Faculty: Fiscal Year 1971

Activity	Employment status			
	Faculty with the M.D.		Faculty with the Ph. D.	
	Strict full-time	Geographic full-time	Strict full-time	Geographic full-time
Average number of activities	2.7	2.8	2.1	2.3
Activities	[1] 100	[1] 100	[1] 100	[1] 100
Teaching	92	96	86	90
Research	68	64	91	84
Service	70	79	16	34
Administration	37	40	19	24
Other	3	3	1	1
Number of activities	[2] 100	[2] 100	[2] 100	[2] 100
One	11	9	15	15
Two	29	24	61	47
Three	39	43	19	29
Four	20	22	4	9
Five	1	1	([3])	([3])

[1] Subtotals exceed 100 percent because most faculty had more than one major area of activity.
[2] Subtotals may not add to 100 percent due to rounding.
[3] Less than 0.5 percent.

Chart 2—Activity Pattern of Men and Women on the Medical School Faculty: Fiscal Year 1971



[1] Percentages for men and women add to more than 100 because most faculty have more than one major area of activity.

Table 4—Basic Specialties of the Medical School Faculty, by Sex: Fiscal Year 1971

Total faculty = 28,452

Basic specialties	Number			Horizontal percentages		Vertical percentages		
	Total	Men	Women	Men	Women	Total	Men	Women
NUMBER OF FACULTY	[1]28, 218	24, 204	4, 014	86	14	[2] 100	[2] 100	[2] 100
NUMBER OF SPECIALTIES	37, 492	32, 439	5, 053	87	13	—	—	—
BASIC SCIENCES	9, 555	8, 383	1, 172	88	12	34	35	29
Anatomy	1, 406	1, 212	194	86	14	5	5	5
Biochemistry	2, 526	2, 251	275	89	11	9	9	7
Biology, general	90	72	18	80	20	([3])	([3])	([3])
Biophysics	230	220	10	96	4	1	1	([3])
Cell biology	116	101	15	87	13	([3])	([3])	([3])
Zoology	57	49	8	86	14	([3])	([3])	([3])
Genetics	484	393	91	81	19	2	2	2
Immunology	423	373	50	88	12	1	2	1
Microbiology	1, 271	1, 067	204	84	16	4	4	5
Nutrition	104	57	47	55	45	([3])	([3])	1
Pharmacology	1, 104	1, 012	92	92	8	4	4	2
Physiology	1, 687	1, 526	161	90	10	6	6	4
All other	57	50	7	88	12	([3])	([3])	([3])
CLINICAL SPECIALTIES	22, 488	20, 291	2, 197	90	10	80	80	55
Anesthesiology	792	666	126	84	16	3	3	3
Dermatology	238	218	20	92	8	1	1	([3])
Endocrinology	639	575	64	90	10	2	2	2
Internal medicine	3, 446	3, 248	198	94	6	12	13	5
Medicine, general	2, 385	2, 219	166	93	7	8	9	4
Nuclear medicine	278	254	24	91	9	1	1	1
Neurology	611	574	37	94	6	2	2	1
Obstetrics and gynecology	898	831	67	93	7	3	3	2
Oncology	182	171	11	94	6	1	1	([3])
Pathology	2, 559	2, 247	312	88	12	9	9	8
Pediatrics	2, 263	1, 699	564	75	25	8	7	14
Physical med. and rehabilitation	308	238	70	77	23	1	1	2
Public health and preventive medicine	578	493	85	85	15	2	2	2
Psychiatry	2, 271	2, 032	239	89	11	8	8	6
Radiology	1, 428	1, 304	124	91	9	5	5	3
Surgery	3, 465	3, 391	74	98	2	12	14	2
All other	147	131	16	89	11	1	1	([3])
MATH., PHY. SCI., AND ENG'G	849	772	77	91	9	3	3	2
BEHAVIORAL SCIENCES	1, 841	1, 185	656	64	36	7	5	16
Psychology	1, 127	894	237	79	21	4	4	6
Social work	507	136	371	27	73	2	1	9
Other behavioral sciences	207	155	48	75	25	1	1	1
ALLIED HEALTH	1, 285	584	701	45	55	5	2	17
ADMINISTRATION	363	331	32	91	9	1	1	1
OTHER SPECIALTIES	297	238	59	80	20	1	1	1
NOT KNOWN	814	655	159	80	20	3	3	4

[1] Excludes 234 faculty, or 1 percent, whose sex was not reported.
[2] Subtotals exceed 100 percent because some faculty have more than one basic specialty.
[3] Less than 0.5 percent.

Chart 3—Basic Specialties of the Medical School Faculty by Sex: Fiscal Year 1971

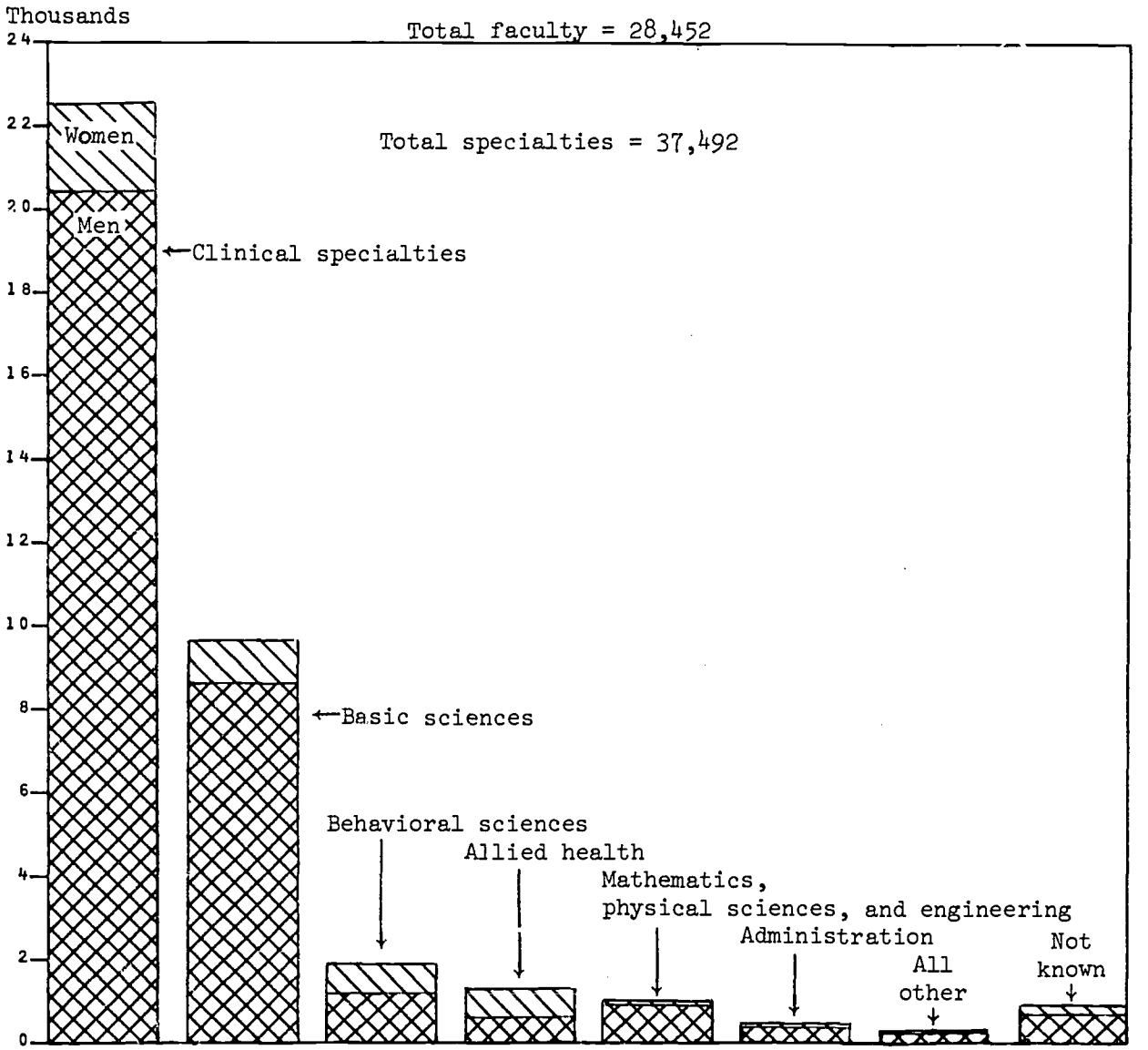


Table 5—Number of Medical Schools of Employment, by Type of Degree and Years of Employment: Fiscal Year 1971

Type of degree	Total [1]	Number of medical schools of employment in the last 10 years			
		One	Two	Three	Four or more
	All faculty				
Total	100	82	15	3	1
Faculty with the M.D. degree	100	81	15	3	1
Faculty with the Ph. D. degree	100	81	16	3	(2)
Faculty with both degrees	100	75	20	4	1
Faculty without the M.D. or Ph. D.	100	91	8	1	(2)
	Faculty with 10 or more years employment				
Total	100	77	18	4	1
Faculty with the M.D. degree	100	76	18	4	1
Faculty with the Ph. D. degree	100	76	19	4	1
Faculty with both degrees	100	69	24	6	1
Faculty without the M.D. or Ph. D.	100	89	10	1	(2)
	Faculty with less than 10 years employment				
Total	100	85	13	2	(2)
Faculty with the M.D. degree	100	84	13	3	(2)
Faculty with the Ph. D. degree	100	85	13	2	(2)
Faculty with both degrees	100	80	17	3	(2)
Faculty without the M.D. or Ph. D.	100	93	6	1	(2)

[1] Percents may not add to 100 due to rounding.
[2] Less than 0.5 percent.

Table 6—Academic Rank Pattern in Fiscal Year 1971 Relative to the Number of Medical Schools of Employment in the Last 10 Years

Number of medical schools of employment in the last 10 years	Total faculty	Academic rank Fiscal Year 1971					
		Total [1]	Professor	Associate professor	Assistant professor	Instructor	All other
	All faculty						
Four or more	149	100	40	27	26	5	2
Three	827	100	33	30	30	3	4
Two	4, 223	100	28	29	33	6	4
One	23, 253	100	22	22	34	16	5
	Faculty with 10 or more years employment						
Four or more	93	100	51	24	22	2	1
Three	448	100	49	29	18	1	3
Two	2, 089	100	46	28	18	4	4
One	8, 860	100	41	26	20	7	5
	Faculty with less than 10 years employment						
Four or more	56	100	22	31	33	9	5
Three	379	100	16	32	43	5	4
Two	2, 134	100	11	30	47	8	4
One	14, 393	100	10	19	43	22	5

[1] Percentages may not add to 100 due to rounding.

Table 7—Sources of Recruitment by Type of Earned Degree: Fiscal Year 1971

Medical school sources of recruitment	Total	Type of earned degree			
		M.D.	Ph. D.	M.D. plus Ph. D.	All others
Total	100	100	100	100	100
Total from training	71	71	79	75	54
Medical school	28	[1] 27	[2] 35	34	17
Residency	25	[3] 40	[4] 1	27	[5] 2
Nonmedical school	18	[1] 4	[2] 43	14	[2] 35
Total from employment	29	[1] 29	[2] 22	25	[2] 46
Federal Government	8	9	6	7	6
Private practice	8	11	1	5	4
State and local government	3	2	3	2	11
Other employment	10	7	12	11	25

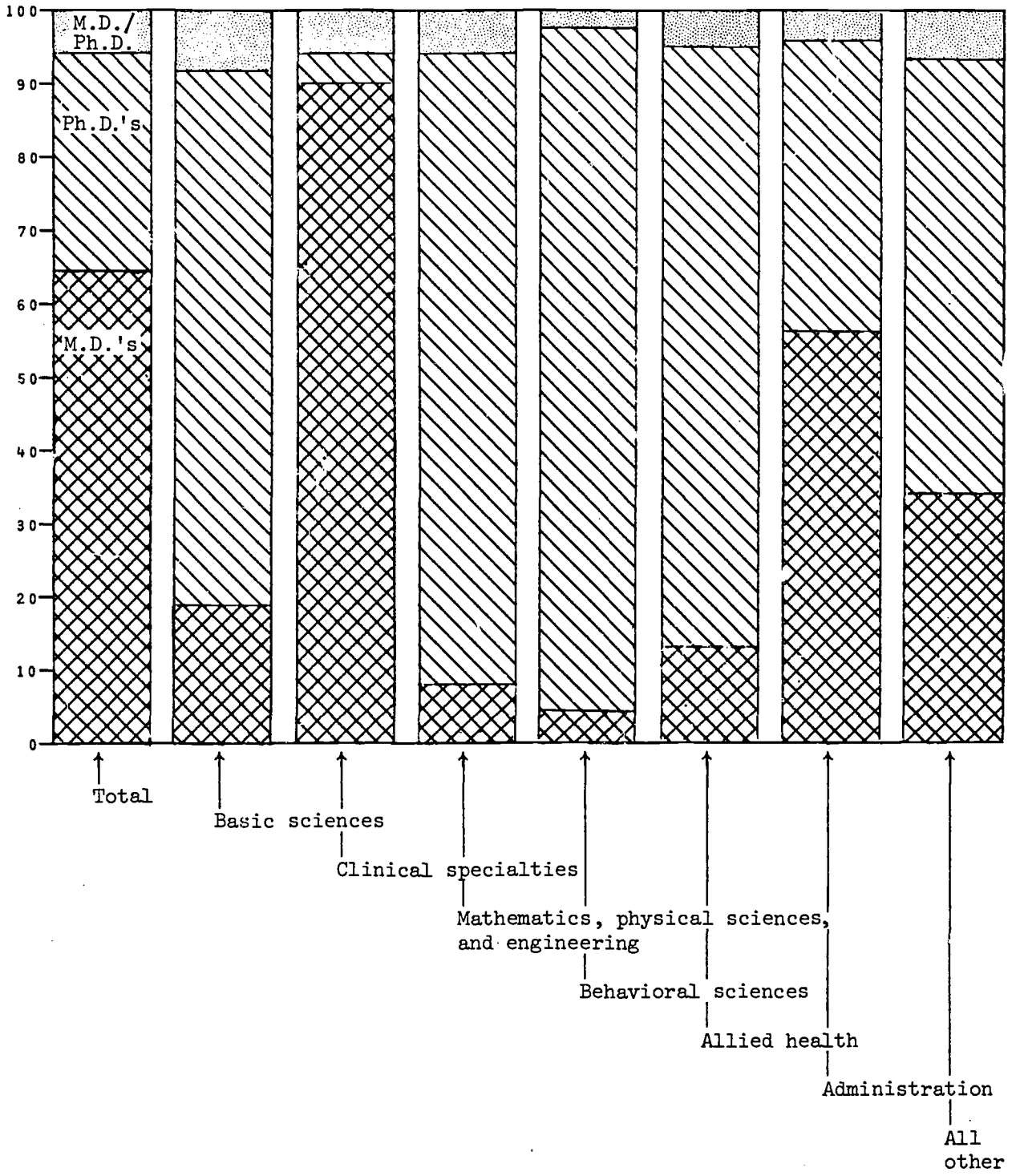
[1] Twenty-three percent of the M.D.'s on the medical school faculty in Fiscal Year 1971 were employed by the same medical school that conferred their M.D. degree.
[2] Less than 4 percent of the Ph. D.'s and other non-M.D.'s on the medical school faculty in Fiscal Year 1971 were employed by a school that conferred their last degree.
[3] Forty-one percent of the M.D.'s on the medical school faculty in Fiscal Year 1971 were employed by the school that was responsible for their residency.
[4] Includes faculty who reported a Ph. D. degree and a health professional degree other than an M.D. or D.O.
[5] Includes faculty who had health professional doctor's degrees other than the M.D. or D.O.

Table 8—Distribution of the Basic Specialties of the Medical School Faculty by Doctoral Degree Types: Fiscal Year 1971

Basic specialties	Total [1]	Doctoral degree types					
		Number of specialties			Horizontal percentages [2]		
		M.D.	Ph. D.	M.D. plus Ph. D.	M.D.	Ph. D.	M.D. plus Ph. D.
NUMBER OF FACULTY	25,567	16,898	7,122	1,547	66	28	6
NUMBER OF SPECIALTIES	34,371	21,977	10,166	2,228	64	30	6
BASIC SCIENCES	9,189	1,629	6,738	822	18	73	9
Anatomy	1,357	184	1,045	128	14	77	9
Biochemistry	2,458	248	2,046	164	10	83	7
Biology, general	79	18	58	3	23	73	4
Biophysics	219	19	186	14	9	85	6
Cell biology	114	19	85	10	17	75	9
Zoology	52	3	49	0	6	94	0
Genetics	468	140	291	37	30	62	8
Immunology	414	139	237	38	34	57	9
Microbiology	1,179	198	910	71	17	77	6
Nutrition	74	25	35	14	34	47	19
Pharmacology	1,081	234	691	156	22	64	14
Physiology	1,639	395	1,059	185	24	65	11
All other	55	7	46	2	13	84	4
CLINICAL SPECIALTIES	22,003	19,601	1,110	1,292	89	5	6
Anesthesiology	776	735	6	35	95	1	4
Dermatology	238	213	12	13	89	5	5
Endocrinology	633	411	165	57	65	26	9
Internal medicine	3,465	3,198	75	192	92	2	6
Medicine, general	2,374	2,198	35	141	93	1	6
Nuclear medicine	259	141	88	30	54	34	12
Neurology	607	541	24	42	89	4	7
Obstetrics and gynecology	891	829	21	41	93	2	5
Oncology	180	150	18	12	83	10	7
Pathology	2,461	2,045	213	203	83	9	8
Pediatrics	2,235	2,109	37	89	94	2	4
Physical med. and rehabilitation	274	254	10	10	93	4	4
Public health and preventive med.	467	336	79	52	72	17	11
Psychiatry	2,243	2,069	102	72	92	5	3
Radiology	1,349	1,189	113	47	88	8	3
Surgery	3,419	3,104	73	242	91	2	7
All other	132	79	39	14	60	29	11
MATH., PHY. SCI., and ENG'G	596	47	516	33	8	87	6
BEHAVIORAL SCIENCES	1,230	46	1,164	20	4	95	2
Psychology	1,026	28	984	14	3	96	1
Social work	36	3	33	0	8	92	0
Other behavioral sciences	168	15	147	6	9	87	4
ALLIED HEALTH	324	39	270	15	12	83	5
ADMINISTRATION	182	103	71	8	57	39	4
OTHER SPECIALTIES	199	67	118	14	34	59	7
NOT KNOWN	648	445	179	24	69	28	4

[1] Excludes faculty and basic specialties of those who have not earned the M.D. or Ph. D. degree.
[2] Percentages may not add to 100 due to rounding.

Chart 4—Percentage Distribution of Doctoral Faculty Specialties Within Major Basic Specialty Categories: Fiscal Year 1971



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