

Supplementary Online Content

Jena AB, Khullar D, Ho O, Olenski AR, Blumenthal DM. Sex Differences in Academic Rank in US Medical Schools in 2014. *JAMA*. doi:10.1001/jama.2015.10680

eTable 1. Characteristics of physicians with missing data on years since residency

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Characteristics of physicians with missing data on years since residency

	Non-missing data on years since residency (N = 84,404)	Missing data on years since residency (N = 6,669)
Faculty rank, No. (%)		
Assistant Professor	46,635 (55.3%)	3,648 (54.7%)
Associate Professor	18,607 (22.1%)	1,474 (22.1%)
Full Professor	19,162 (22.6%)	1,547 (23.2%)
Age, mean years (sd)	50.5 (11.4)	50.5 (12.2)
Specialty, No. (%)		
Anesthesiology	5,131 (6.1)	526 (7.9)
Cardiology	3,717 (4.4)	279 (4.2)
Emergency Medicine	3,285 (3.9)	223 (3.3)
Family Medicine	3,473 (4.1)	322 (4.8)
Gastroenterology	1,829 (2.2)	158 (2.4)
Hematology and Oncology	2,909 (3.4)	239 (3.6)
Infectious Disease	1,871 (2.2)	105 (1.6)
Internal Medicine	8,324 (9.9)	578 (8.7)
Neurology	3,676 (4.4)	204 (3.1)
Obstetrics and Gynecology	3,670 (4.3)	152 (2.3)
Orthopedic Surgery	2,297 (2.7)	180 (2.7)
Other	10,600 (12.6)	1,074 (16.1)
Pathology	3,204 (3.8)	275 (4.1)
Pediatrics	11,680 (13.8)	716 (10.7)
Psychiatry	4,528 (5.4)	261 (3.9)
Radiology	4,393 (5.2)	610 (9.1)
Surgery, general	4,129 (4.9)	326 (4.9)
Surgery, subspecialty	5,688 (6.7)	441 (6.6)
Publications (total), mean no. (sd)	20.1 (30.6)	22.2 (32.3)
NIH grant (at least one), No. (%)	7,675 (9.1)	621 (9.3)
Clinical trial investigator (at least one), No. (%)	6,804 (8.1)	506 (7.6)
Faculty member at top-20 school, No. (%)	24,060 (28.5)	(2006) 30.1

Notes: Data was missing on only one variable, years since residency, in 6,669/91,073 physicians (7.0%). These physicians were excluded from multivariable analysis since the characteristics of these physicians were comparable to physicians for whom years since residency was not missing (see table above). “Top-20” school refers to whether a physician was on faculty at a medical school ranked among the top 20 U.S. medical schools for research by U.S. News and World Report in 2013.

eTable 2. Multivariable analysis of factors associated with faculty rank in 2014, among physicians self-registered with Doximity

	Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)	Associate or Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)	Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)
Sample	All faculty (34,745)		All faculty (34,745)		Associate or full (16,812)	
Sex						
Male	7,295 / 24,004 (30.4%)	Reference	12,988 / 24,004 (54.1%)	Reference	7,295 / 12,988 (56.2%)	Reference
Female	1,486 / 10,741 (13.8%)	-16.6% -3.5% (-4.4,-2.6)	3,824 / 10,741 (35.6%)	-18.5% -2.4% (-3.3,-1.5)	1,486 / 3,824 (38.9%)	-17.3% -5.4% (-7,-3.7)
Age						
< 40 years	30 / 6,622 (0.5%)	Reference	223 / 6,622 (3.4%)	Reference	30 / 223 (13.5%)	Reference
40-44 years	82 / 5,806 (1.4%)	0.9% 1.2% (-0.9,3.4)	1,232 / 5,806 (21.2%)	17.8% 19.3% (17.3,21.4)	82 / 1,232 (6.7%)	-6.8% -19.3% (-28.8,-9.8)
45-49 years	580 / 5,059 (11.5%)	11.0% 14.2% (12.1,16.4)	2,489 / 5,059 (49.2%)	45.8% 32.2% (29.8,34.5)	580 / 2,489 (23.3%)	9.8% 1.1% (-8.1,10.2)
50-54 years	1,434 / 4,917 (29.2%)	28.7% 22.8% (20.5,25.1)	3,236 / 4,917 (65.8%)	62.4% 34.3% (31.6,37)	1,434 / 3,236 (44.3%)	30.8% 13.7% (4.5,23)
55-59 years	1,982 / 4,680 (42.4%)	41.9% 23.8% (21.3,26.3)	3,416 / 4,680 (73.0%)	69.6% 30.7% (27.7,33.7)	1,982 / 3,416 (58.0%)	44.5% 15.9% (6.4,25.4)
60-64 years	2,048 / 3,661 (55.9%)	55.4% 23.6% (20.8,26.3)	2,900 / 3,661 (79.2%)	75.8% 25.6% (22.3,29)	2,048 / 2,900 (70.6%)	57.1% 17.6% (7.8,27.4)
Above 65 years	2,625 / 4,000 (65.6%)	65.1% 18.3%	3,316 / 4,000 (82.9%)	79.5% 17.0%	2,625 / 3,316 (79.2%)	65.7% 11.7%

		(15.4,21.2)		(13.4,20.5)		(1.4,21.9)
Years since residency (ref. increment, 1 yr)		1.2% (1.2,1.3)		1.6% (1.6,1.7)		1.8% (1.6,1.9)
Specialty						
Anesthesiology	359 / 1,817	Reference	786 / 1,817	Reference	359 / 786	Reference
	(19.8%)		(43.3%)		(45.7%)	
Cardiology	542 / 1,856	9.4%	967 / 1,856	8.8%	542 / 967	10.3%
	(29.2%)	-1.5% (- 3.6,0.6)	(52.1%)	-3.0% (- 5.4,-0.6)	(56.0%)	-3.5% (- 7.5,0.5)
Emergency Medicine	150 / 1,217	-7.5%	405 / 1,217	-10.0%	150 / 405	-8.7%
	(12.3%)	-0.2% (- 3,2.6)	(33.3%)	1.2% (- 1.5,3.9)	(37.0%)	0.7% (-4.6,6)
Family Medicine	187 / 1,184	-4.0%	472 / 1,184	-3.4%	187 / 472	-6.1%
	(15.8%)	-2.7% (-5.2,- 0.2)	(39.9%)	-2.5% (- 5.2,0.1)	(39.6%)	-4.2% (- 9.1,0.8)
Gastroenterology	246 / 826	10.0%	440 / 826	10.0%	246 / 440	10.2%
	(29.8%)	0.8% (-2,3.6)	(53.3%)	2.6% (- 0.5,5.7)	(55.9%)	-1.9% (- 6.9,3.1)
Hematology/Oncology	415 / 1,267	13.0%	714 / 1,267	13.1%	415 / 714	12.4%
	(32.8%)	-0.4% (- 2.8,2)	(56.4%)	-1.4% (- 4.2,1.4)	(58.1%)	-2.9% (- 7.3,1.5)
Infectious Disease	228 / 666	14.4%	392 / 666	15.6%	228 / 392	12.5%
	(34.2%)	2.3% (- 0.6,5.2)	(58.9%)	2.3% (- 1,5.6)	(58.2%)	-0.7% (- 5.9,4.4)
Internal Medicine	548 / 3,215	-2.8%	1,225 / 3,215	-5.2%	548 / 1,225	-1.0%
	(17.0%)	-1.8% (- 3.8,0.2)	(38.1%)	-1.3% (- 3.4,0.8)	(44.7%)	-1.9% (- 5.8,1.9)
Neurology	501 / 1,635	10.8%	866 / 1,635	9.7%	501 / 866	12.2%
	(30.6%)	2.5% (0.2,4.7)	(53.0%)	1.6% (- 0.9,4)	(57.9%)	0.9% (-3.2,5)
Obstetrics and Gynecology	331 / 1,558	1.4%	708 / 1,558	2.1%	331 / 708	1.1%
	(21.2%)	-0.6% (- 2.9,1.7)	(45.4%)	0.0% (- 2.5,2.4)	(46.8%)	-2.7% (-7,1.7)
Orthopedic Surgery	251 / 1,018	4.9%	493 / 1,018	5.1%	251 / 493	5.2%
	(24.7%)	0.2% (- 2.4,2.7)	(48.4%)	-0.4% (- 3.2,2.5)	(50.9%)	-1.4% (- 6.2,3.3)
Other	1,413 / 4,673	10.4%	2,480 / 4,673	9.8%	1,413 / 2,480	11.3%
	(30.2%)	1.7% (-	(53.1%)	0.9% (-	(57.0%)	0.6% (-2.8,4)

		0.2,3.5)		1.1,2.9)		
Pathology	381 / 1,081	15.4%	646 / 1,081	16.5%	381 / 646	13.3%
	(35.2%)	6.2% (3.6,8.7)	(59.8%)	6.6% (3.9,9.3)	(59.0%)	6.6% (2.2,10.9)
Pediatrics	1,036 / 4,778	1.9%	2,131 / 4,778	1.3%	1,036 / 2,131	2.9%
	(21.7%)	0.0% (- 1.8,1.9)	(44.6%)	0.9% (- 1,2.9)	(48.6%)	-2.9% (- 6.3,0.5)
Psychiatry	362 / 1,423	5.6%	666 / 1,423	3.5%	362 / 666	8.7%
	(25.4%)	-1.9% (- 4.2,0.4)	(46.8%)	-2.1% (- 4.6,0.4)	(54.4%)	-3.5% (- 7.8,0.9)
Radiology	422 / 1,700	5.0%	790 / 1,700	3.2%	422 / 790	7.7%
	(24.8%)	1.0% (- 1.2,3.2)	(46.5%)	-1.1% (- 3.5,1.4)	(53.4%)	1.2% (- 2.9,5.4)
Surgery, general	513 / 1,791	8.8%	978 / 1,791	11.3%	513 / 978	6.8%
	(28.6%)	5.0% (2.7,7.2)	(54.6%)	4.6% (2.2,6.9)	(52.5%)	5.2% (1.3,9.2)
Surgery, subspecialty	896 / 3,040	9.7%	1,653 / 3,040	11.1%	896 / 1,653	8.5%
	(29.5%)	3.1% (1.1,5.1)	(54.4%)	2.8% (0.7,5)	(54.2%)	2.8% (- 0.8,6.4)
Publications, total (ref. increment, 1 pub.)		0.2% (0.1,0.2)		0.3% (0.3,0.3)		0.2% (0.1,0.2)
Publications, first or last author (ref. increment, 1 pub.)		0.1% (0.1,0.2)		0.2% (0.1,0.3)		0.2% (0.1,0.3)
NIH grant						
No	6,634 / 31,137	Reference	13,803 / 31,137	Reference	6,634 / 13,803	Reference
	(21.3%)		(44.3%)		(48.1%)	
Yes	2,147 / 3,608	38.2%	3,009 / 3,608	39.1%	2,147 / 3,009	23.3%
	(59.5%)	4.5% (3.2,5.7)	(83.4%)	3.9% (2.2,5.5)	(71.4%)	5.4% (3.4,7.5)
Clinical trial investigator						
No	7,175 / 31,295	Reference	14,264 / 31,295	Reference	7,175 / 14,264	Reference
	(22.9%)		(45.6%)		(50.3%)	
Yes	1,606 / 3,450	23.7%	2,548 / 3,450	28.3%	1,606 / 2,548	12.7%
	(46.6%)	6.1% (4.8,7.3)	(73.9%)	7.8% (6.4,9.3)	(63.0%)	6.8% (4.8,8.8)
Faculty at top-20 medical school						

No	5,759 / 23,975	Reference	11,228 / 23,975	Reference	5,759 / 11,228	Reference
	(24.0%)		(46.8%)		(51.3%)	
Yes	3,022 / 10,770	4.1%	5,584 / 10,770	5.0%	3,022 / 5,584	2.8%
	(28.1%)	1.5% (- 1.8,4.9)	(51.8%)	-0.5% (- 4.6,3.7)	(54.1%)	1.3% (- 3.1,5.6)

Notes: eTables 2 and 3 address potential inaccuracies in the database by analyzing sex differences in faculty rank among physicians who self-completed profiles with Doximity (N = 34,745), a sub-group for whom these data are presumably most accurate (eTable2) as well as non-registered physicians (eTable3). In both tables, Column (1) reports factors associated with full professorship among faculty of all ranks. Column (2) reports factors associated with associate or full professorship among faculty of all ranks. Column (3) reports factors associated with full professorship among faculty at the associate or full professor rank. The reported association between faculty rank and publication count (or years since residency) reflects the marginal impact of an additional publication (or year post residency) on the probability of a given faculty rank. “Top-20” school refers to whether a physician was on faculty at a medical school ranked among the top 20 U.S. medical schools for research by U.S. News and World Report in 2013.

eTable 3. Multivariable analysis of factors associated with faculty rank in 2014, among physicians not self-registered with Doximity

	Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)	Associate or Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)	Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)
Sample	All faculty (56,328)		All faculty (56,328)		Associate or full (24,242)	
Sex						
Male	10,059 / 36,605 (27.5%)	Reference	18,365 / 36,605 (50.2%)	Reference	10,059 / 18,365 (54.8%)	Reference
Female	2,137 / 19,723 (10.8%)	-16.7% -4.0% (-4.7,-3.4)	5,877 / 19,723 (29.8%)	-20.4% -3.1% (-3.8,-2.4)	2,137 / 5,877 (36.4%)	-18.4% -6.7% (-8.1,-5.4)
Age						
< 40 years	112 / 10,913 (1.0%)	Reference	388 / 10,913 (3.6%)	Reference	112 / 388 (28.9%)	Reference
40-44 years	125 / 8,412 (1.5%)	0.5% -2.3% (-3.8,-0.8)	1,618 / 8,412 (19.2%)	15.6% 17.0% (15.4,18.5)	125 / 1,618 (7.7%)	-21.2% -41.3% (-46.9,-35.6)
45-49 years	600 / 7,310 (8.2%)	7.2% 6.2% (4.7,7.8)	2,939 / 7,310 (40.2%)	36.6% 29.5% (27.7,31.2)	600 / 2,939 (20.4%)	-8.5% -27.7% (-33,-22.4)
50-54 years	1,608 / 6,995 (23.0%)	22.0% 15.3% (13.7,17)	3,995 / 6,995 (57.1%)	53.5% 34.5% (32.6,36.5)	1,608 / 3,995 (40.3%)	11.4% -13.3% (-18.5,-8)
55-59 years	2,401 / 6,721 (35.7%)	34.7% 17.4% (15.7,19.2)	4,379 / 6,721 (65.2%)	61.6% 32.7% (30.6,34.8)	2,401 / 4,379 (54.8%)	25.9% -9.4% (-14.8,-4)
60-64 years	2,448 / 5,479 (44.7%)	43.7% 17.0% (15.1,18.9)	3,853 / 5,479 (70.3%)	66.7% 29.0% (26.7,31.3)	2,448 / 3,853 (63.5%)	34.6% -8.6% (-14.2,-3)
Above 65 years	4,902 / 10,498 (46.7%)	45.7% 13.2% (11.3,15.1)	7,070 / 10,498 (67.3%)	63.7% 23.5% (21.2,25.7)	4,902 / 7,070 (69.3%)	40.4% -13.0% (-18.9,-7.2)

Years since residency (ref. increment, 1 yr)	1.0%	(1,1.1)	1.3%	(1.3,1.4)	1.6%	(1.5,1.7)
Specialty						
Anesthesiology	515 / 3,840	Reference	1,281 / 3,840	Reference	515 / 1,281	Reference
	(13.4%)		(33.4%)		(40.2%)	
Cardiology	617 / 2,140	15.4%	1,095 / 2,140	17.8%	617 / 1,095	16.1%
	(28.8%)	0.4% (-1.3,2.1)	(51.2%)	-1.7% (-3.8,0.3)	(56.3%)	0.2% (-3.4,3.8)
Emergency Medicine	236 / 2,291	-3.1%	637 / 2,291	-5.6%	236 / 637	-3.2%
	(10.3%)	0.0% (-2,1.9)	(27.8%)	-0.1% (-2.2,2)	(37.0%)	2.0% (-2.3,6.2)
Family Medicine	348 / 2,611	-0.1%	822 / 2,611	-1.9%	348 / 822	2.1%
	(13.3%)	-0.5% (-2.3,1.3)	(31.5%)	-2.6% (-4.5,-0.6)	(42.3%)	2.4% (-1.5,6.3)
Gastroenterology	317 / 1,161	13.9%	560 / 1,161	14.8%	317 / 560	16.4%
	(27.3%)	0.9% (-1.2,3.1)	(48.2%)	-1.5% (-4.1,1.1)	(56.6%)	2.2% (-2.4,6.7)
Hematology/Oncology	592 / 1,881	18.1%	1,016 / 1,881	20.6%	592 / 1,016	18.1%
	(31.5%)	1.2% (-0.6,3)	(54.0%)	-2.5% (-4.7,-0.3)	(58.3%)	1.6% (-2.1,5.3)
Infectious Disease	391 / 1,310	16.4%	733 / 1,310	22.6%	391 / 733	13.1%
	(29.8%)	3.4% (1.3,5.5)	(56.0%)	5.1% (2.7,7.5)	(53.3%)	2.0% (-2,6)
Internal Medicine	886 / 5,687	2.2%	2,014 / 5,687	2.0%	886 / 2,014	3.8%
	(15.6%)	0.1% (-1.3,1.6)	(35.4%)	0.0% (-1.6,1.7)	(44.0%)	0.6% (-2.6,3.7)
Neurology	606 / 2,245	13.6%	1,090 / 2,245	15.2%	606 / 1,090	15.4%
	(27.0%)	3.5% (1.7,5.3)	(48.6%)	3.0% (1,5.1)	(55.6%)	3.4% (-0.2,7)
Obstetrics and Gynecology	436 / 2,264	5.9%	926 / 2,264	7.5%	436 / 926	6.9%
	(19.3%)	2.4% (0.6,4.2)	(40.9%)	2.5% (0.5,4.5)	(47.1%)	3.0% (-0.7,6.6)
Orthopedic Surgery	346 / 1,459	10.3%	728 / 1,459	16.5%	346 / 728	7.3%
	(23.7%)	1.2% (-0.8,3.1)	(49.9%)	2.7% (0.4,5)	(47.5%)	0.5% (-3.5,4.5)
Other	1,870 / 7,001	13.3%	3,433 / 7,001	15.6%	1,870 / 3,433	14.3%
	(26.7%)	2.4% (1,3.7)	(49.0%)	2.8%	(54.5%)	2.5% (-

				(1.2,4.4)		0.4,5.4)
Pathology	707 / 2,398	16.1%	1,328 / 2,398	22.0%	707 / 1,328	13.0%
	(29.5%)	7.1% (5.3,8.9)	(55.4%)	8.5% (6.6,10.5)	(53.2%)	8.0% (4.6,11.4)
Pediatrics	1,359 / 7,618	4.4%	2,955 / 7,618	5.4%	1,359 / 2,955	5.8%
	(17.8%)	2.0% (0.6,3.4)	(38.8%)	1.8% (0.2,3.3)	(46.0%)	1.4% (- 1.5,4.3)
Psychiatry	656 / 3,366	6.1%	1,317 / 3,366	5.7%	656 / 1,317	9.6%
	(19.5%)	-1.3% (- 2.8,0.3)	(39.1%)	-2.2% (-4,- 0.4)	(49.8%)	-1.8% (- 5.2,1.6)
Radiology	726 / 3,303	8.6%	1,365 / 3,303	7.9%	726 / 1,365	13.0%
	(22.0%)	3.3% (1.6,4.9)	(41.3%)	0.8% (- 1.1,2.6)	(53.2%)	6.2% (2.8,9.6)
Surgery, general	719 / 2,664	13.6%	1,316 / 2,664	16.0%	719 / 1,316	14.4%
	(27.0%)	5.4% (3.7,7.2)	(49.4%)	3.7% (1.8,5.7)	(54.6%)	7.3% (3.9,10.7)
Surgery, subspecialty	869 / 3,089	14.7%	1,626 / 3,089	19.2%	869 / 1,626	13.2%
	(28.1%)	3.4% (1.8,5)	(52.6%)	2.8% (0.9,4.7)	(53.4%)	4.0% (0.7,7.3)
Publications, total (ref. increment, 1 pub.)		0.2% (0.2,0.2)		0.5% (0.5,0.5)		0.3% (0.3,0.3)
Publications, first or last author (ref. increment, 1 pub.)		0.2% (0.2,0.2)		0.5% (0.5,0.5)		0.3% (0.3,0.3)
NIH grant						
No	9,508 / 51,640	Reference	20,354 / 51,640	Reference	9,508 / 20,354	Reference
	(18.4%)		(39.4%)		(46.7%)	
Yes	2,688 / 4,688	38.9%	3,888 / 4,688	43.5%	2,688 / 3,888	22.4%
	(57.3%)	3.0% (1.9,4.1)	(82.9%)	2.9% (1.3,4.5)	(69.1%)	3.8% (1.8,5.7)
Clinical trial investigator						
No	10,411 / 52,468	Reference	21,357 / 52,468	Reference	10,411 / 21,357	Reference
	(19.8%)		(40.7%)		(48.7%)	
Yes	1,785 / 3,860	26.4%	2,885 / 3,860	34.0%	1,785 / 2,885	13.2%
	(46.2%)	5.7% (4.5,6.9)	(74.7%)	8.6% (7.2,10.1)	(61.9%)	6.0% (4.1,7.9)
Faculty at top-20 medical school						

No	8,120 / 41,032	Reference	16,627 / 41,032	Reference	8,120 / 16,627	Reference
	(19.8%)		(40.5%)		(48.8%)	
Yes	4,076 / 15,296	6.8%	7,615 / 15,296	9.3%	4,076 / 7,615	4.7%
	(26.6%)	1.3% (- 1.7,4.3)	(49.8%)	-0.1% (- 4.6,4.3)	(53.5%)	1.5% (- 2.3,5.3)

Notes: eTables 2 and 3 address potential inaccuracies in the database by analyzing sex differences in faculty rank among physicians who self-completed profiles with Doximity (N = 34,745), a sub-group for whom these data are presumably most accurate (eTable2) as well as non-registered physicians (eTable3). In both tables, Column (1) reports factors associated with full professorship among faculty of all ranks. Column (2) reports factors associated with associate or full professorship among faculty of all ranks. Column (3) reports factors associated with full professorship among faculty at the associate or full professor rank. The reported association between faculty rank and publication count (or years since residency) reflects the marginal impact of an additional publication (or year post residency) on the probability of a given faculty rank. . “Top-20” school refers to whether a physician was on faculty at a medical school ranked among the top 20 U.S. medical schools for research by U.S. News and World Report in 2013.

eTable 4. Multivariable analysis of factors associated with faculty rank in 2014, among physicians with a history of NIH funding

	Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)	Associate or Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)	Full professor Crude proportion (%)	Absolute difference in proportion Unadjusted Adjusted (95% CI)
Sample	All faculty (13,225)		All faculty (13,225)		Associate or full (10,197)	
Sex						
Male	5,457 / 9,790 (55.7%)	Reference	7,922 / 9,790 (80.9%)	Reference	5,457 / 7,922 (68.9%)	Reference
Female	1,197 / 3,435 (34.8%)	-20.9% -2.8% (-4.3,-1.4)	2,275 / 3,435 (66.2%)	-14.7% -1.0% (-2.2,0.1)	1,197 / 2,275 (52.6%)	-16.3% -3.5% (-5.3,-1.7)
Age						
< 40 years	12 / 760 (1.6%)	Reference	57 / 760 (7.5%)	Reference	12 / 57 (21.1%)	Reference
40-44 years	60 / 1,785 (3.4%)	1.8% 1.7% (-6.4,9.8)	642 / 1,785 (36.0%)	28.5% 18.5% (14.1,23)	60 / 642 (9.3%)	-11.8% -17.8% (-32,-3.5)
45-49 years	423 / 2,079 (20.3%)	18.7% 18.9% (11.1,26.6)	1,462 / 2,079 (70.3%)	62.8% 27.8% (23,32.6)	423 / 1,462 (28.9%)	7.8% -0.9% (-14.6,12.8)
50-54 years	1,145 / 2,291 (50.0%)	48.4% 29.5% (21.6,37.4)	2,026 / 2,291 (88.4%)	80.9% 31.8% (26.6,36.9)	1,145 / 2,026 (56.5%)	35.4% 10.5% (-3.3,24.3)
55-59 years	1,534 / 2,152 (71.3%)	69.7% 30.9% (22.7,39.1)	2,039 / 2,152 (94.7%)	87.2% 31.9% (26.2,37.5)	1,534 / 2,039 (75.2%)	54.1% 11.9% (-2.1,25.8)
60-64 years	1,479 / 1,770 (83.6%)	82.0% 30.5% (21.9,39)	1,708 / 1,770 (96.5%)	89.0% 25.9% (19.4,32.5)	1,479 / 1,708 (86.6%)	65.5% 12.9% (-1.4,27.2)
Above 65 years	2,001 / 2,388 (83.8%)	82.2% 24.2% (15.5,32.9)	2,263 / 2,388 (94.8%)	87.3% 22.5% (16.4,28.6)	2,001 / 2,263 (88.4%)	67.3% 7.6% (-6.8,22.1)

Years since residency (ref. increment, 1 yr)		1.8% (1.7,1.9)		1.4% (1.3,1.5)		2.0% (1.8,2.2)
Specialty						
Anesthesiology	129 / 331	Reference	234 / 331	Reference	129 / 234	Reference
	(39.0%)		(70.7%)		(55.1%)	
Cardiology	402 / 746	14.9%	592 / 746	8.7%	402 / 592	12.8%
	(53.9%)	0.6% (-4,5.2)	(79.4%)	-3.0% (-6.8,0.7)	(67.9%)	-2.2% (-7.9,3.4)
Emergency Medicine	72 / 178	1.4%	127 / 178	0.6%	72 / 127	1.6%
	(40.4%)	8.3% (1.9,14.6)	(71.3%)	4.4% (-0.1,8.9)	(56.7%)	7.0% (-0.5,14.5)
Family Medicine	60 / 133	6.1%	99 / 133	3.7%	60 / 99	5.5%
	(45.1%)	-3.6% (-10.8,3.6)	(74.4%)	-3.5% (-9.4,2.4)	(60.6%)	-5.1% (-14.4,4.1)
Gastroenterology	233 / 414	17.3%	326 / 414	8.0%	233 / 326	16.4%
	(56.3%)	0.1% (-5.2,5.3)	(78.7%)	-1.7% (-6.1,2.7)	(71.5%)	-3.0% (-9.5,3.4)
Hematology/Oncology	596 / 1,363	4.7%	970 / 1,363	0.5%	596 / 970	6.3%
	(43.7%)	-2.1% (-6.4,2.2)	(71.2%)	-4.5% (-8,-1.1)	(61.4%)	-4.6% (-9.9,0.7)
Infectious Disease	292 / 575	11.8%	435 / 575	5.0%	292 / 435	12.0%
	(50.8%)	1.0% (-3.8,5.8)	(75.7%)	-3.8% (-7.7,0.2)	(67.1%)	-1.4% (-7.4,4.5)
Internal Medicine	441 / 931	8.4%	707 / 931	5.2%	441 / 707	7.3%
	(47.4%)	-1.3% (-5.8,3.2)	(75.9%)	-1.9% (-5.4,1.7)	(62.4%)	-3.5% (-9,2.1)
Neurology	487 / 903	14.9%	715 / 903	8.5%	487 / 715	13.0%
	(53.9%)	3.7% (-0.8,8.2)	(79.2%)	0.7% (-2.8,4.3)	(68.1%)	1.0% (-4.4,6.5)
Obstetrics and Gynecology	191 / 407	7.9%	310 / 407	5.5%	191 / 310	6.5%
	(46.9%)	4.8% (-0.2,9.9)	(76.2%)	1.0% (-3,4.9)	(61.6%)	2.9% (-3.2,9)
Orthopedic Surgery	90 / 173	13.0%	141 / 173	10.8%	90 / 141	8.7%
	(52.0%)	4.1% (-2.5,10.7)	(81.5%)	5.8% (0.7,10.8)	(63.8%)	1.2% (-6.8,9.1)
Other	1,307 / 2,453	14.3%	1,921 / 2,453	7.6%	1,307 / 1,921	12.9%
	(53.3%)	1.8% (-2.3,5.9)	(78.3%)	-0.8% (-4.1,2.4)	(68.0%)	-0.4% (-5.4,4.6)
Pathology	260 / 401	25.8%	351 / 401	16.8%	260 / 351	19.0%
	(64.8%)	7.2% (2.1,12.3)	(87.5%)	3.2% (-1.1,7.4)	(74.1%)	5.0% (-1.2,11.1)
Pediatrics	800 / 1,817	5.0%	1,332 / 1,817	2.6%	800 / 1,332	5.0%
	(44.0%)	-0.2% (-)	(73.3%)	-1.4% (-)	(60.1%)	-2.9% (-)

		4.3,4)		4.7,1.9)		8.1,2.2)
Psychiatry	390 / 713	15.7%	570 / 713	9.2%	390 / 570	13.3%
	(54.7%)	-0.2% (- 4.9,4.5)	(79.9%)	-0.6% (- 4.4,3.2)	(68.4%)	-3.0% (- 8.8,2.7)
Radiology	152 / 282	14.9%	218 / 282	6.6%	152 / 218	14.6%
	(53.9%)	6.3% (0.8,11.7)	(77.3%)	-0.7% (- 5.3,4)	(69.7%)	6.6% (0,13.2)
Surgery, general	311 / 580	14.6%	482 / 580	12.4%	311 / 482	9.4%
	(53.6%)	7.3% (2.6,12)	(83.1%)	3.7% (0,7.5)	(64.5%)	5.1% (- 0.6,10.7)
Surgery, subspecialty	441 / 825	14.5%	667 / 825	10.1%	441 / 667	11.0%
	(53.5%)	6.0% (1.6,10.5)	(80.8%)	1.4% (- 2.2,5)	(66.1%)	3.4% (- 2.1,8.8)
Publications, total (ref. increment, 1 pub.)		0.1% (0.1,0.2)		0.2% (0.1,0.2)		0.1% (0.1,0.2)
Publications, first or last author (ref. increment, 1 pub.)		0.2% (0.1,0.2)		0.1% (0,0.2)		0.2% (0.1,0.2)
Faculty at top-20 medical school						
No	3,956 / 7,449	Reference	5,903 / 7,449	Reference	3,956 / 5,903	Reference
	(53.1%)		(79.2%)		(67.0%)	
Yes	2,698 / 5,776	-6.4%	4,294 / 5,776	-4.9%	2,698 / 4,294	-4.2%
	(46.7%)	-3.0% (- 6,0.1)	(74.3%)	-2.9% (- 5.5,-0.3)	(62.8%)	-3.6% (-7.0,- 0.2)

Notes: Table addresses lack of information on job track/nature, which may be associated with both faculty rank and sex. For example, women physicians may choose clinical track faculty appointments rather than research tracks, the latter being associated with more rapid promotion. We addressed this issue by focusing on a sub-group of physicians with prior NIH funding who are presumably more likely to be on research tracks. Column (1) reports factors associated with full professorship among faculty of all ranks. Column (2) reports factors associated with associate or full professorship among faculty of all ranks. Column (3) reports factors associated with full professorship among faculty at the associate or full professor rank. The reported association between faculty rank and publication count (or years since residency) reflects the marginal impact of an additional publication (or year post residency) on the probability of a given faculty rank. “Top-20” school refers to whether a physician was on faculty at a medical school ranked among the top 20 U.S. medical schools for research by U.S. News and World Report in 2013.