

**2011 Report on Johns Hopkins University
School of Medicine Faculty Salary Analysis, Fiscal Year 2010**

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1 Overview

The analyses in this report were done on the salaries as of July 1, 2010 for the full time faculty ranks Assistant Professor through Professor. Excluded from the study were all deans, department and institute directors and faculty who were previously in these leadership positions. The salary and other data are obtained from the SAP system and the rank, years at rank, and gender was validated by the Registrar's Office. The faculty salary data in the SAP system are the full-time equivalent (FTE) salary, which are comprised of the base salary (part A) plus any supplemental salary for administrative, educational or clinical roles assumed by the faculty (part B) ($FTE=A+B$). Total salary is the FTE salary plus bonus (part C) that is defined in the individual departmental compensation plans or that have been agreed upon by the faculty and department ($Total\ salary=A+B+C$). Not all departments in the SOM utilize the A+B+C system, so it is imperative that faculty be aware of the individual compensation plans of their department and how they are individually compensated for their work. The 2011 Report on the Johns Hopkins School of Medicine faculty Salary Analysis found that in terms of the FTE salary, women faculty earned 2.2% less than men in FY 2010.

2 Background

The results in this report represent an annual faculty salary analyses at the School of Medicine since 2004 as part of efforts to assess gender equity in salary, and constitute the seventh year in which salary data have been analyzed. As directed by the Dean, department directors' efforts are focused on achieving faculty salary equity for all faculty. In terms of Full-Time Equivalent (FTE) salary, this new report revealed that women faculty earned 2.2% less than men in FY 2010. In FY 2009, women earned 3.1% less than men, and the salary difference between genders has varied from -4% to -2.6% over the last five years.

The structure of faculty salary compensation in the SOM is quite complicated and varies in the 31

departments. Although the Medical School Council has supported the compensation of the SOM faculty by an A+B+C system, this has not been adopted for the School of Medicine. The part A salary reflects the base salary of the faculty, while the B component is related to leadership, educational or administrative roles, as well as clinical productivity. The B component is up to the discretion of the division chief and department chair. The components of the B part of the salary and how they are compensated is not uniform across the SOM. The A+B components of the salary are combined and become the full time equivalent salary or FTE salary of the individual faculty member. The part C salary is generally a bonus and is received once yearly by faculty members after the fiscal year ends. The part C salary is defined by the individual departments and reasons for receiving a C component are variable. In fact, many departments do not have a C component contributing to the salary of their faculty. The C part of the salary is added to the A+B component for purposes of this report and this is labeled as total salary in the faculty salary analysis. Again it is important to note that the A+B+C system is not uniformly used in the SOM. There are departments that place a great significance on using all 3 components to faculty salary levels, where others predominantly only have an A component to faculty salary.

3 Methods

For 1653 faculty, statistics were gathered on gender and rank distributions, both school-wide and within departments, and mean years in rank by degree and gender were tabulated. FTE and Total Salary (including bonuses) were tabulated by degree, rank and gender. These results are shown in Tables 1-7.

There were 9 large groups of departments analyzed.¹ In addition, Basic Science was considered a group consisting of Art as Applied to Medicine, History of Medicine, Biological Chemistry, Biomedical Engineering, Biophysics, Cell Biology, Functional Anatomy, Molecular & Comparative Pathobiology, Molecular Biology and Genetics, Neuroscience, Pharmacology, and Physiology. Surgery, Otolaryngology (including Dentistry and Oral Surgery), Orthopaedic surgery, Neurosurgery and Urology were combined to form the Surgery group. Lastly Dermatology, Emergency Medicine, Genetic Medicine, OB/GYN, and Physical Medicine/Rehabilitation were collected into an “Other” category, and Radiation Oncology was included in Oncology because they had fewer than 20 male or female faculty. This resulted in the formation of 12 groups for the analysis. In results reported for years prior to 2009, note that Art as Applied to Medicine and History of Medicine were included in the “Other” category, however, since then these departments have been included within the Basic Science group.

This year’s analysis of salary differences between genders used the same models that were developed in the FY 2004 - 2009 analyses (see Appendix: Model Specifications). We calculated the percent difference for women relative to men (with negative differences indicating that women earned less)

¹We calculated differences for Medicine and Surgery after excluding their higher earning specialties (cardiology and GI for medicine and Neurosurgery for Surgery). For Pediatrics, we included an adjustment for the rank-specific effect of the percentile for AAAP survey of Pediatric Salaries.

for the School of Medicine overall, as well as within ranks, within degrees (MD and non-MD²), within rank by years-in-rank³, and within departments. Our models adjusted for the administrative data available: department, department-specific rank, degree, and years-in-rank. Modeling the log salary allowed us to calculate the percentage difference between genders, and also protects against a few large or a few small salaries having high influence on the regression results. Of the 1657 faculty members, 4 were removed as potentially influential outliers.

4 Results

The distribution of faculty gender, school-wide, was 1080 men (65%) and 573 women (35%). Of the 19 departments, there are 3 in which women made up more than half the faculty, these being OB/Gyn (82%), Pediatrics (53%), and Dermatology (71%); there was also a relatively high percentage representation of women in Rehabilitation (50%).

Of the remaining large departments (the 9 having more than 70 faculty), women comprised 19 - 45% of the faculty: in descending order of representation, Psychiatry (45%), Pathology (38%), Medicine (36%), Anesthesiology (35%), Basic science (29%), Oncology (29%), Neurology (25%), and Radiology (21%). The lowest representation of women was in the Surgery Group (19%).

After adjustment for the available administrative descriptors (such as rank, and years at rank), women's FTE salaries on average were 2.2% less than men's FTE salaries school-wide in FY 2010.

A further analysis, which excluded all faculty in Cardiology and Gastroenterology (Department of Medicine) and Neurosurgery (Surgery Group), showed that women's FTE salaries were 1.6% less than men's FTE salaries school-wide in FY 2010. This further analysis was done because there are few women in these relatively highly paid specialties.

5 Summary

The JHSOM has been analyzing faculty salary data since 2004 as part of an effort to assess gender equity in salary. This report demonstrates that women faculty earned 2.2% less than men in FY 2010. This is consistent with findings over the previous 6 years.

There are several limitations identified which could explain the findings noted in this salary survey. First, although we control for department, there may exist sub-specialties within departments that are compensated differently and are comprised of men and women in different proportions. For example, if women are more highly represented in lower-paying sub-specialties within departments, this could result in a downward bias in the estimate of gender difference in compensation. Some

²An MD is defined to be someone who has at least one of the following degrees: MD, DMD, MBBCh, MBBS, MBChB

³New: Professors (≤ 4 years), Assoc. Prof. (≤ 3), Assist. Prof. (≤ 2); Mid: Professors (4-10), Assoc. Prof. (3-7), Assist. Prof. (2-5); Long: Professors (> 10), Assoc. Prof. (> 7), Assist. Prof. (> 5)

divisions that are procedurally oriented and have higher financial incomes and male representation are excluded from some analyses (GI and Cardiology from Medicine and Neurosurgery from Surgery), however, there may be other subspecialties that could be excluded or otherwise controlled for as well.

In addition, although all deans, department and institute directors and faculty who were previously in these leadership positions were excluded from the data provided for analysis, the data may still include faculty with other levels or forms of leadership that are not recorded. Differences between genders in representation in such positions could also account for some of the estimated difference in compensation between men and women. Rank is controlled for, however, this variable most likely would not fully capture gender differences in compensation due to leadership roles.

Another limitation of this report is that the data on years at current rank, which is controlled for in this analysis, encompass only time at Hopkins, and not time from previous employment at other universities. If time at current rank including time spent with previous employers is the relevant consideration in salary determinations rather than time at current rank at Hopkins, this could lead to some inaccuracies in the analysis results, depending on how well time at current rank at Hopkins serves as a surrogate for time at current rank anywhere.

Despite the limitations of the data available for this study and the diversity of faculty throughout the SOM, women faculty across the entire SOM receive lower salaries (2.2%) than their male counterparts in FY2010. Note that this figure represents an overall average—department-specific reports accompany this executive summary with department-specific results. In conclusion, it is critical that the SOM continue to analyze this faculty salary data in a transparent fashion which is readily made available to the faculty. Faculty awareness of how they are compensated is critical to salary equity and fairness. We would encourage all faculty to familiarize themselves with their departmental compensation plans and to discuss their individual compensation at their annual faculty review.

6 Future Directions

The SOM will continue to analyze the faculty salary data on an annual basis.

The Vice Dean of Faculty has also asked that all department directors develop a clear plan for salary compensation for their individual departments and that this compensation plan be made readily available to faculty members. Many department directors have already provided their compensation plans to the Vice dean's office, and several of these plans are attached to this report to serve as examples of the various compensation models which exist across the School of Medicine.

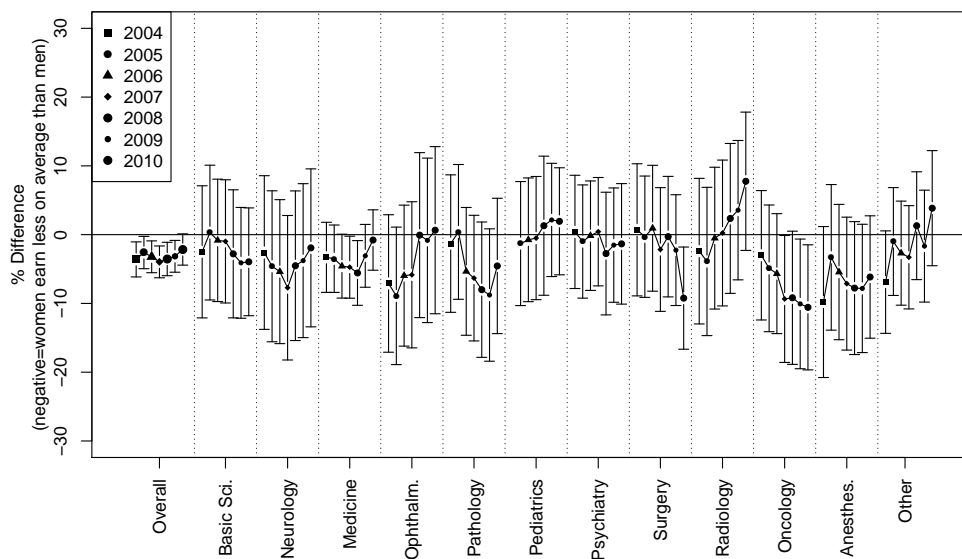


Figure 1: % Differences in FTE Salary (+/- 95% CI) 2004-2010 (n=1653)

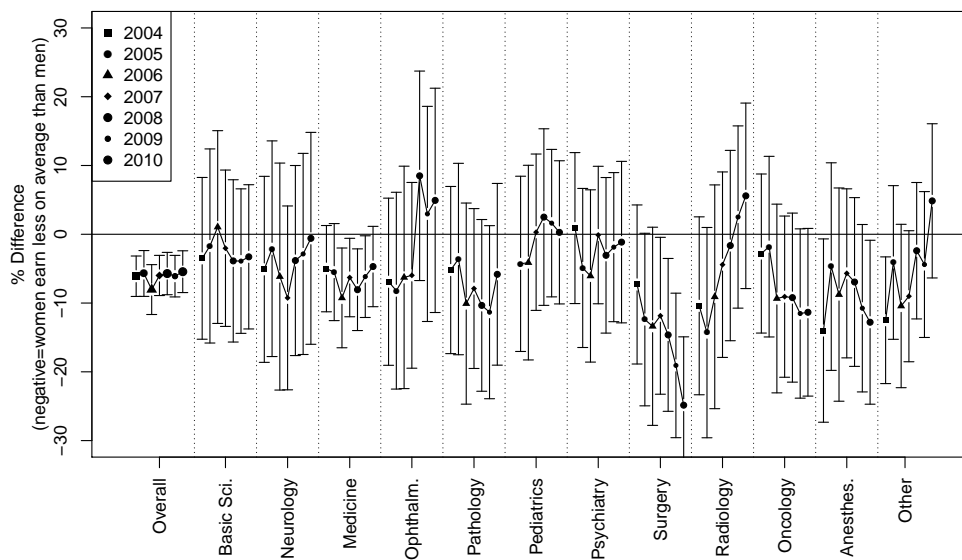


Figure 2: % Differences in Total Salary (+/- 95% CI) 2004-2010 (n=1653)

7 Tables of Descriptive Statistics

Table 1: Department By Gender, Counts (%)

Department	Male	Female	Total
Basic Science	87 (71)	35 (29)	122
OB/GYN	8 (18)	36 (82)	44
Neurology	58 (75)	19 (25)	77
Medicine	264 (64)	146 (36)	410
Ophthalmology	42 (66)	22 (34)	64
Pathology	53 (62)	32 (38)	85
Pediatrics	56 (47)	64 (53)	120
Psychiatry	62 (55)	50 (45)	112
Surgery	168 (81)	40 (19)	208
Radiology	81 (79)	22 (21)	103
Oncology	70 (71)	29 (29)	99
Anesthesiology	72 (65)	39 (35)	111
Art Applied to Medicine	3 (60)	2 (40)	5
History of Medicine	4 (57)	3 (43)	7
Dermatology	5 (29)	12 (71)	17
Physical Medicine/Rehab	7 (50)	7 (50)	14
Emergency Medicine	19 (76)	6 (24)	25
Genetic Medicine	11 (69)	5 (31)	16
Radiation Oncology	10 (71)	4 (29)	14
Total	1080 (65)	573 (35)	1653

Table 2: Department By Rank, Counts (%)

Department	Prof	Assoc Prof	Assist Prof	Total
Basic Science	62 (51)	22 (18)	38 (31)	122
OB/GYN	6 (14)	8 (18)	30 (68)	44
Neurology	26 (34)	19 (25)	32 (42)	77
Medicine	102 (25)	109 (27)	199 (49)	410
Ophthalmology	22 (34)	18 (28)	24 (38)	64
Pathology	36 (42)	25 (29)	24 (28)	85
Pediatrics	25 (21)	27 (22)	68 (57)	120
Psychiatry	22 (20)	34 (30)	56 (50)	112
Surgery	48 (23)	65 (31)	95 (46)	208
Radiology	25 (24)	28 (27)	50 (49)	103
Oncology	34 (34)	31 (31)	34 (34)	99
Anesthesiology	13 (12)	24 (22)	74 (67)	111
Art Applied to Medicine	0 (0)	3 (60)	2 (40)	5
History of Medicine	3 (43)	2 (29)	2 (29)	7
Dermatology	1 (6)	4 (24)	12 (71)	17
Physical Medicine/Rehab	1 (7)	3 (21)	10 (71)	14
Emergency Medicine	0 (0)	7 (28)	18 (72)	25
Genetic Medicine	5 (31)	7 (44)	4 (25)	16
Radiation Oncology	2 (14)	5 (36)	7 (50)	14
Total	433 (26)	441 (27)	779 (47)	1653

Table 3: Gender By Rank, Counts (Row %) (Col %)

Gender	Prof	Assoc Prof	Assist Prof	Total
Male	341 (32) (79)	311 (29) (71)	428 (40) (55)	1080 (65)
Female	92 (16) (21)	130 (23) (29)	351 (61) (45)	573 (35)
Total	433 (26)	441 (27)	779 (47)	1653

Table 4: Years in Rank, Degree by Rank by Gender–0,25,50,75,100th percentiles (mean, SD)

Degree	Rank	Male
Non-MD	Prof	0.2, 4.6, 9.1, 15.4, 34.7 (10.3, 7.1)
	Assoc Prof	0.2, 2.2, 5.6, 9.2, 27.7 (6.8, 5.9)
	Assist Prof	0.2, 1.8, 3.8, 6.0, 25.8 (4.3, 3.5)
MD	Prof	0.1, 4.0, 9.0, 13.3, 36.9 (9.6, 7.1)
	Assoc Prof	0.1, 1.7, 4.0, 7.5, 36.0 (6.0, 6.2)
	Assist Prof	0.2, 1.8, 4.0, 6.0, 35.0 (5.0, 5.1)
Degree	Rank	Female
Non-MD	Prof	0.4, 4.5, 7.2, 9.5, 25.3 (8.5, 6.2)
	Assoc Prof	0.4, 2.0, 5.6, 9.8, 24.6 (6.4, 5.1)
	Assist Prof	0.2, 1.8, 3.6, 5.3, 16.5 (4.4, 3.4)
MD	Prof	1.0, 3.1, 5.2, 9.0, 19.5 (6.0, 3.8)
	Assoc Prof	0.2, 1.7, 3.1, 6.5, 34.0 (5.1, 5.4)
	Assist Prof	0.1, 2.0, 3.7, 6.8, 34.0 (5.1, 4.7)

Table 5: FTE Salary in \$1000s (unadjusted), Degree by Rank by Gender–0,25,50,75,100th percentiles (mean, SD)

Degree	Rank	Male
Non-MD	Prof	64.5, 140.0, 165.1, 189.5, 333.6 (169.1, 40.5)
	Assoc Prof	76.1, 102.3, 116.5, 127.5, 186.7 (117.6, 22.6)
	Assist Prof	63.6, 78.0, 85.0, 95.2, 249.6 (90.7, 24.6)
MD	Prof	62.1, 196.6, 225.6, 259.3, 500.4 (229.7, 49.8)
	Assoc Prof	85.9, 163.2, 188.7, 226.4, 350.0 (196.7, 47.0)
	Assist Prof	58.7, 122.0, 149.7, 192.6, 265.2 (158.8, 47.7)
Degree	Rank	Female
Non-MD	Prof	97.8, 139.5, 155.8, 173.6, 199.7 (156.7, 24.3)
	Assoc Prof	59.2, 96.9, 109.6, 124.2, 196.0 (110.8, 22.1)
	Assist Prof	56.5, 78.0, 84.9, 91.9, 228.2 (88.2, 21.0)
MD	Prof	150.5, 195.0, 208.8, 235.9, 327.1 (214.6, 33.9)
	Assoc Prof	108.2, 145.6, 172.2, 214.7, 325.1 (182.2, 47.9)
	Assist Prof	65.6, 122.0, 146.0, 175.1, 319.3 (149.8, 39.7)

Table 6: Total Salary in \$1000s (unadjusted), Degree by Rank by Gender—0,25,50,75,100th percentiles (mean, SD)

Degree	Rank	Male
Non-MD	Prof	64.5, 144.2, 169.8, 195.7, 333.6 (174.2, 44.1)
	Assoc Prof	76.1, 103.7, 118.1, 130.2, 196.6 (120.1, 24.5)
	Assist Prof	64.6, 79.6, 86.2, 97.8, 249.6 (92.3, 24.8)
MD	Prof	82.5, 207.1, 243.6, 309.7, 1070.1 (279.5, 124.5)
	Assoc Prof	88.4, 173.3, 212.9, 284.5, 645.0 (240.9, 98.0)
	Assist Prof	58.9, 131.1, 170.1, 255.9, 599.8 (199.9, 97.3)
Degree	Rank	Female
Non-MD	Prof	97.8, 141.1, 160.3, 178.5, 207.8 (160.5, 26.8)
	Assoc Prof	59.2, 98.9, 115.2, 127.2, 217.4 (115.9, 28.4)
	Assist Prof	57.5, 78.5, 86.1, 95.0, 281.9 (90.5, 25.6)
MD	Prof	154.2, 197.4, 217.7, 251.9, 411.3 (237.5, 64.6)
	Assoc Prof	108.2, 152.9, 183.1, 245.3, 555.1 (208.9, 83.9)
	Assist Prof	68.0, 127.7, 157.2, 200.0, 394.3 (167.9, 57.3)

Table 7: Faculty Receiving Bonuses, Gender By Rank, Counts [%] (Row %) (Col %)

Group	Prof	Assoc Prof	Assist Prof	Total
Male	236 [69] (32) (84)	216 [69] (29) (74)	284 [66] (39) (55)	736 [68] (68)
Female	46 [50] (13) (16)	75 [58] (21) (26)	229 [65] (65) (45)	350 [61] (32)
All	282 [65] (26)	291 [66] (27)	513 [66] (47)	1086 [66]

8 Tables of Analysis Results

Table 8: Overall Percent Differences (95% CI) in FTE Salary (FY2010), negative=women earn less than men. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine, and removing Neurosurgery specialty from Surgery.

	FTE Salary	FTE Salary*
Overall	-2.2 (-4.3, 0.1)	-1.6 (-3.8, 0.6)
Professor	-1.9 (-6.6, 3.1)	-1.9 (-6.5, 3.0)
Associate Professor	-3.0 (-7.2, 1.3)	-2.2 (-6.3, 2.1)
Assistant Professor	-1.4 (-4.4, 1.6)	-0.8 (-3.7, 2.3)
MD degree	-1.8 (-4.5, 0.9)	-1.0 (-3.7, 1.7)
Non-MD degree	-0.9 (-5.1, 3.5)	-0.5 (-4.7, 3.7)
Professor (New)	-2.8 (-11.2, 6.4)	-2.5 (-10.8, 6.6)
Professor (Mid)	-1.9 (-8.5, 5.3)	-0.5 (-7.1, 6.6)
Professor (Long)	7.5 (-5.1, 21.8)	4.9 (-7.5, 18.9)
Assoc Prof (New)	-3.3 (-9.5, 3.3)	-2.7 (-8.8, 3.9)
Assoc Prof (Mid)	0.0 (-7.6, 8.3)	0.9 (-6.9, 9.3)
Assoc Prof (Long)	-4.6 (-12.4, 3.7)	-3.2 (-10.9, 5.1)
Assist Prof (New)	-1.8 (-6.9, 3.6)	-1.7 (-6.8, 3.7)
Assist Prof (Mid)	-1.7 (-6.5, 3.4)	1.2 (-3.7, 6.4)
Assist Prof (Long)	-1.6 (-6.6, 3.6)	-2.6 (-7.5, 2.6)

Table 9: Overall Percent Differences (95% CI) in TOTAL Salary (FY2010), negative=women earn less than men. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine, and removing Neurosurgery specialty from Surgery.

	TOTAL Salary	TOTAL Salary*
Overall	-5.4 (-8.2, -2.5)	-4.4 (-7.2, -1.6)
Professor	-4.4 (-10.5, 2.1)	-3.8 (-9.7, 2.5)
Associate Professor	-5.6 (-10.9, 0.0)	-4.3 (-9.5, 1.2)
Assistant Professor	-5.0 (-8.7, -1.1)	-3.9 (-7.6, 0.0)
MD degree	-6.9 (-10.2, -3.3)	-5.5 (-8.9, -2.0)
Non-MD degree	1.6 (-4.1, 7.6)	2.4 (-3.2, 8.2)
Professor (New)	-6.3 (-17.0, 5.7)	-5.0 (-15.4, 6.7)
Professor (Mid)	-3.5 (-12.1, 6.0)	-1.4 (-9.9, 7.8)
Professor (Long)	5.3 (-10.8, 24.3)	2.3 (-13.1, 20.5)
Assoc Prof (New)	-7.7 (-15.4, 0.8)	-6.1 (-13.8, 2.2)
Assoc Prof (Mid)	1.8 (-8.4, 13.1)	3.0 (-7.2, 14.4)
Assoc Prof (Long)	-7.7 (-17.5, 3.3)	-5.9 (-15.5, 4.8)
Assist Prof (New)	-3.2 (-9.9, 3.9)	-4.1 (-10.6, 2.9)
Assist Prof (Mid)	-7.4 (-13.4, -1.0)	-2.6 (-8.7, 4.0)
Assist Prof (Long)	-4.7 (-11.1, 2.2)	-5.8 (-12.0, 0.8)

Table 10: Overall Departmental Percent Differences (95% CI) in FTE Salary (FY2010), negative=women earn less than men. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine, and removing Neurosurgery specialty from Surgery.

Department	FTE Salary	TOTAL Salary
Overall	-2.2 (-4.3, 0.1)	-5.4 (-8.2, -2.5)
Overall*	-1.6 (-3.8, 0.6)	-4.4 (-7.2, -1.6)
Basic Science	-3.9 (-11.1, 3.7)	-3.3 (-12.7, 7.1)
Neurology	-1.9 (-12.3, 9.7)	-0.6 (-14.3, 15.3)
Medicine	-0.8 (-5.0, 3.6)	-4.7 (-10.0, 1.0)
Medicine*	1.7 (-3.1, 6.7)	-0.3 (-6.4, 6.1)
Ophthalmology	0.6 (-10.5, 13.2)	4.9 (-10.3, 22.7)
Pathology	-4.5 (-13.3, 5.1)	-5.8 (-17.1, 7.0)
Pediatrics	1.9 (-5.5, 10.0)	0.3 (-9.4, 11.0)
Psychiatry	-1.3 (-9.4, 7.5)	-1.1 (-11.8, 10.8)
Surgery	-9.2 (-15.6, -2.4)	-24.9 (-31.8, -17.2)
Surgery*	-8.6 (-14.9, -1.8)	-24.5 (-31.2, -17.1)
Radiology	7.8 (-2.3, 18.9)	5.6 (-7.3, 20.3)
Oncology	-10.6 (-18.2, -2.3)	-11.3 (-21.2, -0.2)
Anesthesiology	-6.2 (-14.0, 2.4)	-12.8 (-22.3, -2.1)
Other	3.8 (-4.3, 12.7)	4.9 (-6.0, 16.9)

Table 11: Overall Departmental Differences (95% CI) in FTE Salary (FY2010) in \$1000s, negative=women earn less than men. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine, and removing Neurosurgery specialty from Surgery.

Department	FTE Salary	TOTAL Salary
Overall	-5.0 (-8.2, -1.7)	-15.5 (-21.4, -9.6)
Overall*	-3.8 (-7.0, -0.6)	-12.9 (-18.6, -7.3)
Basic Science	-5.5 (-14.2, 3.3)	-4.4 (-13.3, 4.4)
Neurology	-3.8 (-15.8, 8.2)	-1.4 (-17.0, 14.1)
Medicine	-4.9 (-11.0, 1.3)	-14.6 (-24.1, -5.1)
Medicine*	-0.3 (-5.7, 5.2)	-4.8 (-11.7, 2.2)
Ophthalmology	-2.8 (-16.7, 11.2)	4.7 (-43.6, 52.9)
Pathology	-7.3 (-17.1, 2.6)	-10.1 (-28.8, 8.6)
Pediatrics	1.9 (-7.0, 10.9)	-1.0 (-11.7, 9.7)
Psychiatry	-2.9 (-9.3, 3.5)	-2.2 (-9.5, 5.0)
Surgery	-14.3 (-27.5, -1.1)	-77.9 (-106.4, -49.4)
Surgery*	-13.1 (-26.4, 0.1)	-76.4 (-101.8, -50.9)
Radiology	8.8 (-2.7, 20.4)	-0.3 (-22.3, 21.7)
Oncology	-19.3 (-34.8, -3.7)	-22.8 (-48.2, 2.7)
Anesthesiology	-12.2 (-29.3, 4.9)	-35.5 (-63.8, -7.2)
Other	6.0 (-8.3, 20.2)	10.8 (-13.0, 34.7)

Table 12: Percent Differences (95% CI) FTE Salary for FY 2005-2010. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine.

Department	2005	2006	2007	2008	2009	2010
Overall	-2.6 (-5.0, -0.2)	-3.2 (-5.4, -1.0)	-4.0 (-6.1, -1.7)	-3.5 (-5.8, -1.2)	-3.1 (-5.4, -0.9)	-2.2 (-4.3, 0.1)
Basic Science	0.3 (-9.7, 10.3)	-0.8 (-9.1, 8.2)	-1.0 (-9.3, 8.1)	-2.8 (-11.2, 6.5)	-4.1 (-11.4, 3.8)	-3.9 (-11.1, 3.7)
Neurology	-4.6 (-15.8, 6.6)	-5.4 (-14.6, 4.8)	-7.7 (-16.7, 2.2)	-4.5 (-14.1, 6.1)	-3.8 (-13.7, 7.3)	-1.9 (-12.3, 9.7)
Medicine	-3.5 (-8.5, 1.5)	-4.6 (-8.9, -0.1)	-4.7 (-8.9, -0.4)	-5.6 (-9.9, -1.1)	-3.1 (-7.4, 1.4)	-0.8 (-5.0, 3.6)
Medicine*	-1.1 (-6.7, 4.5)	-1.5 (-6.3, 3.4)	-1.6 (-6.2, 3.1)	-2.6 (-7.4, 2.4)	0.0 (-5.0, 5.1)	1.7 (-3.1, 6.7)
Ophthalmology	-8.9 (-19.1, 1.3)	-6.0 (-14.9, 3.9)	-5.8 (-15.1, 4.4)	-0.1 (-11.1, 12.3)	-0.8 (-11.7, 11.4)	0.6 (-10.5, 13.2)
Pathology	0.4 (-9.6, 10.4)	-5.3 (-13.6, 3.7)	-6.3 (-14.3, 2.4)	-8.0 (-16.4, 1.3)	-8.8 (-17.0, 0.2)	-4.5 (-13.3, 5.1)
Pediatrics	-1.3 (-10.5, 7.9)	-0.7 (-9.1, 8.4)	-0.5 (-8.8, 8.6)	1.3 (-8.2, 11.8)	2.1 (-5.8, 10.7)	1.9 (-5.5, 10.0)
Psychiatry	-1.0 (-9.4, 7.4)	-0.1 (-7.6, 8.0)	0.4 (-7.0, 8.5)	-2.7 (-10.9, 6.1)	-1.5 (-9.2, 6.8)	-1.3 (-9.4, 7.5)
Surgery	-0.3 (-9.3, 8.7)	0.9 (-7.7, 10.4)	-2.2 (-10.4, 6.8)	-0.3 (-8.5, 8.6)	-2.2 (-9.7, 5.8)	-9.2 (-15.6, -2.4)
Radiology	-3.9 (-14.9, 7.1)	-0.5 (-10.0, 10.0)	0.2 (-9.6, 11.1)	2.4 (-7.9, 13.8)	3.6 (-6.2, 14.3)	7.8 (-2.3, 18.9)
Oncology	-4.9 (-14.3, 4.5)	-5.7 (-13.4, 2.7)	-9.4 (-17.2, -0.8)	-9.2 (-17.4, -0.2)	-10.1 (-18.0, -1.4)	-10.6 (-18.2, -2.3)
Anesthesiology	-3.3 (-14.1, 7.5)	-5.4 (-14.1, 4.1)	-7.1 (-15.5, 2.1)	-7.8 (-16.1, 1.4)	-7.8 (-15.8, 1.0)	-6.2 (-14.0, 2.4)
Other	-1.0 (-9.0, 7.0)	-2.7 (-9.7, 4.8)	-3.3 (-10.2, 4.1)	1.3 (-6.2, 9.4)	-1.7 (-9.2, 6.5)	3.8 (-4.3, 12.7)

Table 13: Percent Differences (95% CI) TOTAL Salary for FY 2005-2010. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine.

Department	2005	2006	2007	2008	2009	2010
Overall	-5.7 (-9.1, -2.3)	-8.0 (-11.3, -4.7)	-6.0 (-8.7, -3.2)	-5.7 (-8.5, -2.8)	-6.1 (-8.9, -3.2)	-5.4 (-8.2, -2.5)
Basic Science	-1.7 (-16.1, 12.7)	1.0 (-11.7, 15.7)	-2.0 (-12.3, 9.4)	-3.9 (-14.3, 7.8)	-3.9 (-13.2, 6.5)	-3.3 (-12.7, 7.1)
Neurology	-2.1 (-18.1, 13.9)	-6.2 (-19.9, 10.0)	-9.3 (-20.3, 3.3)	-3.8 (-15.8, 9.9)	-2.9 (-15.6, 11.9)	-0.6 (-14.3, 15.3)
Medicine	-5.5 (-12.7, 1.7)	-9.3 (-15.5, -2.6)	-6.3 (-11.4, -0.9)	-8.1 (-13.3, -2.5)	-6.2 (-11.5, -0.5)	-4.7 (-10.0, 1.0)
Medicine*	-2.7 (-10.7, 5.3)	-6.7 (-13.7, 0.9)	-2.1 (-7.8, 4.0)	-3.6 (-9.5, 2.6)	-0.8 (-7.0, 5.7)	-0.3 (-6.4, 6.1)
Ophthalmology	-8.2 (-22.8, 6.4)	-6.3 (-19.8, 9.5)	-6.0 (-17.5, 7.1)	8.5 (-6.3, 25.6)	3.0 (-11.4, 19.7)	4.9 (-10.3, 22.7)
Pathology	-3.6 (-17.8, 10.6)	-10.1 (-21.9, 3.5)	-7.9 (-17.7, 3.1)	-10.3 (-20.6, 1.2)	-11.3 (-21.5, 0.2)	-5.8 (-17.1, 7.0)
Pediatrics	-4.3 (-17.3, 8.7)	-4.1 (-16.4, 9.9)	0.3 (-10.2, 12.0)	2.5 (-9.5, 16.1)	1.6 (-8.5, 12.8)	0.3 (-9.4, 11.0)
Psychiatry	-4.9 (-16.7, 6.9)	-6.1 (-16.8, 6.1)	-0.1 (-9.4, 10.1)	-3.1 (-13.2, 8.2)	-1.9 (-11.7, 9.0)	-1.1 (-11.8, 10.8)
Surgery	-12.4 (-25.2, 0.4)	-13.4 (-24.6, -0.5)	-11.9 (-21.1, -1.5)	-14.6 (-23.4, -4.9)	-19.1 (-26.9, -10.3)	-24.9 (-31.8, -17.2)
Radiology	-14.3 (-29.9, 1.3)	-9.1 (-22.2, 6.3)	-4.4 (-16.1, 8.9)	-1.6 (-14.0, 12.4)	2.5 (-9.8, 16.5)	5.6 (-7.3, 20.3)
Oncology	-1.8 (-15.2, 11.6)	-9.3 (-20.6, 3.5)	-9.1 (-18.9, 1.9)	-9.2 (-19.4, 2.3)	-11.5 (-21.5, -0.3)	-11.3 (-21.2, -0.2)
Anesthesiology	-4.7 (-20.1, 10.7)	-8.8 (-21.4, 5.9)	-5.7 (-16.3, 6.3)	-6.9 (-17.4, 4.8)	-10.8 (-20.7, 0.4)	-12.8 (-22.3, -2.1)
Other	-4.1 (-15.5, 7.3)	-10.4 (-20.2, 0.5)	-9.0 (-17.1, -0.1)	-2.4 (-11.4, 7.5)	-4.4 (-13.8, 6.0)	4.9 (-6.0, 16.9)

9 Appendix

Model Specifications

For Tables 8, 9, 10, 12 and 13 log salary was modeled, as detailed below. For Table 11 and appendix Table 18 and 19, actual salary was modeled with robust variance estimates.

The models for Tables 8-9 and appendix Tables 18-19 adjust for department, rank separately within each department, degree, and year-in-rank, and estimate:

- 1) an overall gender difference,
- 2) gender differences separately for each rank,
- 3) gender differences separately for each degree type,
- 4) gender differences separately for each rank/year-in-rank combination.

The models for Table 10, 11, 12 and 13 estimate a separate gender difference for each department, adjusting for department-specific rank, degree, and years-in-rank.

Table 14: Department By Degree, Counts (%)

Department	Non-MD	MD	Total
Basic Science	111 (91)	11 (9)	122
OB/GYN	7 (16)	37 (84)	44
Neurology	16 (21)	61 (79)	77
Medicine	59 (14)	351 (86)	410
Ophthalmology	21 (33)	43 (67)	64
Pathology	23 (27)	62 (73)	85
Pediatrics	15 (12)	105 (88)	120
Psychiatry	45 (40)	67 (60)	112
Surgery	38 (18)	170 (82)	208
Radiology	34 (33)	69 (67)	103
Oncology	27 (27)	72 (73)	99
Anesthesiology	8 (7)	103 (93)	111
Art Applied to Medicine	5 (100)	0 (0)	5
History of Medicine	7 (100)	0 (0)	7
Dermatology	2 (12)	15 (88)	17
Physical Medicine/Rehab	9 (64)	5 (36)	14
Emergency Medicine	2 (8)	23 (92)	25
Genetic Medicine	6 (38)	10 (62)	16
Radiation Oncology	4 (29)	10 (71)	14
Total	439 (27)	1214 (73)	1653

Table 15: Degree By Rank, Counts (Row %) (Col %)

Degree	Prof	Assoc Prof	Assist Prof	Total
Non-MD	138 (31) (32)	110 (25) (25)	191 (44) (25)	439 (27)
MD	295 (24) (68)	331 (27) (75)	588 (48) (75)	1214 (73)
Total	433 (26)	441 (27)	779 (47)	1653

Table 16: Faculty Receiving Bonuses By Department and Rank, showing numbers [%] of faculty members receiving bonuses, and of those the number (%) who are women.

Department	Prof-All	Prof-F	Assoc-All	Assoc-F	Assist-All	Assist-F
Basic Science	15 [24]	6 [40] (40)	5 [23]	3 [43] (60)	7 [18]	3 [23] (43)
OB/GYN	6 [100]	2 [100] (33)	5 [62]	3 [50] (60)	22 [73]	20 [71] (91)
Neurology	26 [100]	5 [100] (19)	18 [95]	3 [100] (17)	28 [88]	10 [91] (36)
Medicine	64 [63]	7 [33] (11)	64 [59]	14 [41] (22)	126 [63]	62 [68] (49)
Ophthalmology	14 [64]	1 [50] (7)	14 [78]	7 [78] (50)	10 [42]	4 [36] (40)
Pathology	36 [100]	8 [100] (22)	22 [88]	8 [80] (36)	23 [96]	13 [93] (57)
Pediatrics	10 [40]	6 [50] (60)	9 [33]	5 [36] (56)	34 [50]	17 [45] (50)
Psychiatry	4 [18]	1 [12] (25)	15 [44]	4 [40] (27)	37 [66]	17 [53] (46)
Surgery	39 [81]	1 [25] (3)	51 [78]	7 [64] (14)	65 [68]	17 [68] (26)
Radiology	24 [96]	5 [100] (21)	23 [82]	7 [100] (30)	33 [66]	8 [80] (24)
Oncology	29 [85]	3 [60] (10)	29 [94]	6 [100] (21)	28 [82]	16 [89] (57)
Anesthesiology	12 [92]	0	21 [88]	5 [100] (24)	67 [91]	28 [82] (42)
Art Applied to Medicine	0	0	0	0	0	0
History of Medicine	0	0	0	0	0	0
Dermatology	1 [100]	0	1 [25]	1 [50] (100)	5 [42]	4 [40] (80)
Physical Medicine/Rehab	1 [100]	1 [100] (100)	3 [100]	0	8 [80]	5 [83] (62)
Emergency Medicine	0	0	7 [100]	1 [100] (14)	16 [89]	5 [100] (31)
Genetic Medicine	1 [20]	0	0	0	2 [50]	0
Radiation Oncology	0	0	4 [80]	1 [100] (25)	2 [29]	0
Total	282 [65]	46 [50] (16)	291 [66]	75 [58] (26)	513 [66]	229 [65] (45)

Table 17: Value of Bonuses in \$1000s, Degree by Rank by Gender—0,25,50,75,100th percentiles (mean, SD)

Degree	Rank	Male
Non-MD	Prof	0.1, 3.9, 7.5, 18.0, 79.9 (11.6, 13.9)
	Assoc Prof	0.8, 2.4, 3.6, 6.0, 62.2 (7.1, 12.2)
	Assist Prof	0.3, 1.8, 2.5, 4.4, 28.0 (4.8, 6.3)
MD	Prof	0.1, 9.4, 25.5, 73.7, 716.5 (63.1, 99.4)
	Assoc Prof	0.3, 11.9, 33.8, 65.8, 395.0 (55.3, 67.9)
	Assist Prof	0.1, 9.9, 30.0, 75.1, 403.5 (53.8, 65.8)
Degree	Rank	Female
Non-MD	Prof	1.4, 3.9, 5.0, 11.5, 25.0 (8.7, 7.9)
	Assoc Prof	1.0, 3.1, 5.0, 9.8, 111.4 (12.8, 27.5)
	Assist Prof	0.3, 1.9, 3.8, 5.6, 53.7 (6.2, 9.8)
MD	Prof	0.2, 6.5, 15.0, 54.5, 181.5 (40.7, 51.1)
	Assoc Prof	0.2, 4.7, 18.1, 37.5, 315.5 (40.9, 63.9)
	Assist Prof	0.0, 5.0, 11.5, 36.0, 235.5 (24.0, 29.2)

Table 18: Overall Differences (95% CI) in FTE Salary (FY2010) in \$1000s, negative=women earn less than men. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine, and removing Neurosurgery specialty from Surgery.

	FTE Salary	FTE Salary*
Overall	-5.0 (-8.2, -1.7)	-3.8 (-7.0, -0.6)
Professor	-10.9 (-17.8, -4.0)	-10.2 (-17.1, -3.4)
Associate Professor	-5.2 (-12.2, 1.8)	-3.7 (-10.7, 3.3)
Assistant Professor	-2.6 (-6.9, 1.7)	-1.2 (-5.5, 3.0)
MD degree	-6.1 (-10.2, -1.9)	-4.4 (-8.5, -0.3)
Non-MD degree	2.0 (-3.9, 8.0)	2.6 (-3.5, 8.8)
Professor (New)	-9.6 (-20.5, 1.3)	-7.5 (-18.6, 3.6)
Professor (Mid)	-10.3 (-20.4, -0.1)	-6.9 (-16.8, 3.1)
Professor (Long)	-0.2 (-18.5, 18.0)	-6.4 (-23.3, 10.6)
Assoc Prof (New)	-7.0 (-17.7, 3.7)	-5.6 (-15.9, 4.7)
Assoc Prof (Mid)	0.3 (-14.1, 14.8)	1.7 (-13.4, 16.8)
Assoc Prof (Long)	-7.3 (-18.7, 4.1)	-4.4 (-16.0, 7.2)
Assist Prof (New)	-3.6 (-11.2, 3.9)	-2.9 (-10.7, 5.0)
Assist Prof (Mid)	-1.8 (-8.8, 5.2)	2.1 (-4.7, 8.9)
Assist Prof (Long)	-3.8 (-11.7, 4.2)	-4.5 (-12.0, 3.1)

Table 19: Overall Differences (95% CI) in Total Salary (FY2010) in \$1000s, negative=women earn less than men. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine, and removing Neurosurgery specialty from Surgery.

	Total Salary	Total Salary*
Overall	-15.5 (-21.4, -9.6)	-12.9 (-18.6, -7.3)
Professor	-24.6 (-37.7, -11.6)	-21.1 (-33.8, -8.5)
Associate Professor	-12.4 (-25.6, 0.9)	-9.8 (-22.6, 3.1)
Assistant Professor	-12.4 (-20.3, -4.6)	-10.1 (-17.8, -2.4)
MD degree	-22.7 (-30.4, -14.9)	-19.1 (-26.7, -11.6)
Non-MD degree	11.4 (2.6, 20.3)	12.7 (3.6, 21.9)
Professor (New)	-23.8 (-47.3, -0.3)	-16.8 (-39.5, 5.9)
Professor (Mid)	-22.3 (-41.9, -2.6)	-14.9 (-32.7, 3.0)
Professor (Long)	-12.9 (-38.9, 13.1)	-21.1 (-45.3, 3.1)
Assoc Prof (New)	-20.3 (-42.0, 1.4)	-16.4 (-36.3, 3.5)
Assoc Prof (Mid)	5.0 (-21.0, 31.0)	6.2 (-20.9, 33.2)
Assoc Prof (Long)	-15.9 (-31.7, 0.0)	-11.8 (-27.8, 4.2)
Assist Prof (New)	-7.0 (-20.1, 6.0)	-8.3 (-21.2, 4.7)
Assist Prof (Mid)	-17.3 (-30.4, -4.3)	-8.5 (-21.2, 4.2)
Assist Prof (Long)	-14.6 (-29.4, 0.1)	-15.8 (-30.2, -1.4)