2010 Report on Johns Hopkins University School of Medicine Faculty Salary Analysis, Fiscal Year 2009

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1 Overview

The analyses in this report were done on the salaries as of July 1, 2009 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 2010 Report on the Johns Hopkins School of Medicine faculty Salary Analysis found that in terms of the FTE salary, women faculty earned 3.1% less than men in FY 2009.

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 sixth 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 3.1% less than men in FY 2009. In 2008, women earned 3.5% 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 1594 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, this year these departments are 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 - 2008 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.

4 Results

The distribution of faculty gender, school-wide, was 1036 men (65%) and 558 women (35%). Of the 19 departments, there are 4 in which women made up more than half the faculty, these being OB/Gyn (80%), Pediatrics (54%), Dermatology (62%), and Rehabilitation (54%); there was also a relatively high percentage representation of women in Psychiatry (46%).

Of the remaining large departments (the 8 having more than 70 faculty), women comprised 18 - 38% of the faculty: in descending order of representation, Pathology (38%), Medicine (36%), Anesthesiology (31%), Oncology (30%), Basic science (29%), Neurology (29%), and Radiology (24%). The lowest representation of women was in the Surgery Group (18%).

After adjustment for the available administrative descriptors (such as rank, and years at rank), women's FTE salaries on average were 3.1% less than men's FTE salaries school-wide in FY 2009.

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 2.4% less than men's FTE salaries school-wide in FY 2009. 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 3.1% less than men in FY 2009. This is consistent with findings over the previous 5 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

 $^{^2}$ An MD is defined to be someone who has at least one of the following degrees: MD, DMD, MBBCH, MBBS, MBChB

 $^{^3}$ New: 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 (3.1%) than their male counterparts in FY2009. 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.

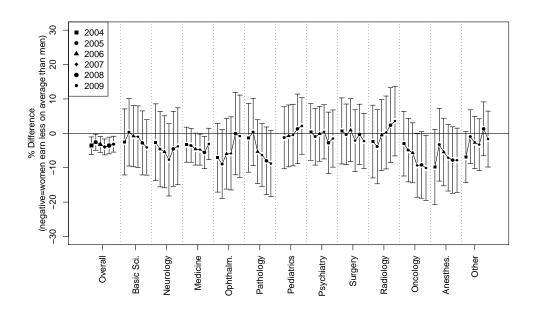


Figure 1: % Differences in FTE Salary (+/-95% CI) 2004-2009 (n=1594)

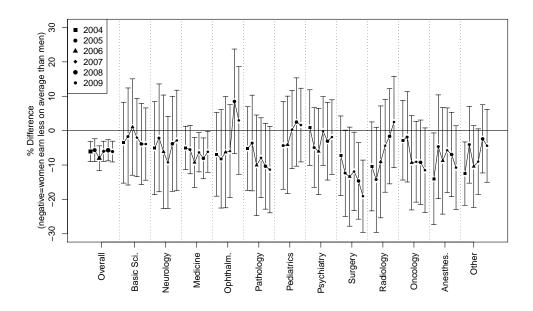


Figure 2: % Differences in Total Salary (+/- 95% CI) 2004-2009 (n=1594)

7 Tables of Descriptive Statistics

Table 1: Department By Gender, Counts (%)

Department	Male	Female	Total
Basic Science	83 (71)	34 (29)	117
OB/GYN	9 (20)	36 (80)	45
Neurology	52 (71)	21 (29)	73
Medicine	250 (64)	138 (36)	388
Opthalmology	43 (65)	23 (35)	66
Pathology	55 (62)	33 (38)	88
Pediatrics	53 (46)	63 (54)	116
Psychiatry	65 (54)	56 (46)	121
Surgery	158 (82)	34 (18)	192
Radiology	72 (76)	23 (24)	95
Oncology	62 (70)	27 (30)	89
Anesthesiology	74 (69)	34 (31)	108
Art Applied to Medicine	3 (60)	2 (40)	5
History of Medicine	4 (57)	3 (43)	7
Dermatology	5 (38)	8 (62)	13
Physical Medicine/Rehab	6 (46)	7 (54)	13
Emergency Medicine	21 (78)	6 (22)	27
Genetic Medicine	11 (65)	6 (35)	17
Radiation Oncology	10 (71)	4 (29)	14
Total	1036 (65)	558 (35)	1594

Table 2: Department By Rank, Counts (%)

Department	Prof	Assoc Prof	Assist Prof	Total
Basic Science	60 (51)	22 (19)	35 (30)	117
OB/GYN	6 (13)	10 (22)	29 (64)	45
Neurology	22 (30)	20 (27)	31 (42)	73
Medicine	96 (25)	107 (28)	185 (48)	388
Opthalmology	21 (32)	17 (26)	28 (42)	66
Pathology	35 (40)	28 (32)	25 (28)	88
Pediatrics	26 (22)	27 (23)	63 (54)	116
Psychiatry	21 (17)	35 (29)	65 (54)	121
Surgery	41 (21)	57 (30)	94 (49)	192
Radiology	25 (26)	24 (25)	46 (48)	95
Oncology	34 (38)	28 (31)	27 (30)	89
Anesthesiology	10 (9)	27 (25)	71 (66)	108
Art Applied to Medicine	0 (0)	3 (60)	2 (40)	5
History of Medicine	3 (43)	2 (29)	2 (29)	7
Dermatology	2 (15)	3 (23)	8 (62)	13
Physical Medicine/Rehab	1 (8)	2 (15)	10 (77)	13
Emergency Medicine	0 (0)	5 (19)	22 (81)	27
Genetic Medicine	5 (29)	8 (47)	4 (24)	17
Radiation Oncology	3 (21)	4 (29)	7 (50)	14
Total	411 (26)	429 (27)	754 (47)	1594

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

Gender	Prof	Assoc Prof	Assist Prof	Total
Male	322 (31) (78)	301 (29) (70)	413 (40) (55)	1036 (65)
Female	89 (16) (22)	128 (23) (30)	341 (61) (45)	558 (35)
Total	411 (26)	429 (27)	754 (47)	1594

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, 4.8, 10.0, 15.8, 34.0 (10.8, 7.3)
	Assoc Prof	0.2, 3.6, 5.8, 8.3, 26.7 (6.7, 5.4)
	Assist Prof	0.2, 1.5, 3.8, 5.7, 24.8 (4.2, 3.3)
MD	Prof	0.2, 4.2, 8.7, 13.5, 38.0 (9.9, 7.6)
	Assoc Prof	0.2, 1.8, 4.1, 7.8, 35.0 (6.0, 6.1)
	Assist Prof	0.1, 2.0, 4.0, 7.0, 32.0 (5.3, 4.8)
Degree	Rank	Female
Non-MD	Prof	0.2, 4.2, 6.6, 8.7, 24.3 (8.0, 6.1)
	Assoc Prof	0.4, 2.2, 5.1, 8.9, 23.6 (6.3, 5.0)
	Assist Prof	0.2, 1.7, 3.0, 5.6, 17.1 (4.1, 3.5)
MD	Prof	0.7, 2.4, 5.4, 8.2, 30.5 (6.3, 5.4)
	Assoc Prof	0.2, 1.3, 3.3, 5.9, 33.0 (4.8, 5.3)
	Assist Prof	0.1, 1.7, 3.8, 6.0, 33.0 (4.9, 4.6)

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	86.0, 144.8, 165.4, 189.3, 333.6 (171.7, 39.9)
	Assoc Prof	76.1, 103.9, 117.0, 128.8, 229.6 (119.5, 24.0)
	Assist Prof	63.6, 78.0, 85.1, 95.0, 256.6 (92.0, 29.9)
MD	Prof	52.9, 196.6, 225.6, 259.3, 500.4 (229.7, 51.0)
	Assoc Prof	82.8, 161.0, 186.3, 222.9, 322.9 (193.2, 45.3)
	Assist Prof	57.7, 124.0, 150.5, 196.3, 265.2 (160.6, 48.5)
Degree	Rank	Female
Non-MD	Prof	97.8, 139.0, 154.5, 172.3, 197.3 (155.6, 24.0)
	Assoc Prof	59.2, 95.1, 105.1, 119.6, 196.0 (108.4, 23.0)
	Assist Prof	51.2, 78.8, 83.9, 90.9, 228.2 (88.8, 21.5)
MD	Prof	61.3, 181.9, 205.7, 229.0, 278.1 (202.7, 40.9)
	Assoc Prof	105.6, 145.6, 168.0, 213.4, 325.1 (182.4, 48.2)

Table 6: Total Salary in \$1000s (unadjusted), Degree by Rank by Gender-0.25,50,75,100th percentiles (mean, SD)

Rank	Male
Prof	86.0, 152.9, 169.2, 191.1, 340.4 (175.1, 41.1)
Assoc Prof	76.1, 105.3, 120.6, 131.4, 229.6 (122.4, 25.9)
Assist Prof	63.6, 79.6, 86.6, 96.9, 277.9 (94.1, 31.5)
Prof	52.9, 204.1, 240.9, 307.0, 1072.9 (275.7, 125.1)
Assoc Prof	92.5, 169.4, 201.7, 266.9, 613.2 (227.6, 87.1)
Assist Prof	57.7, 131.8, 164.1, 241.1, 566.8 (194.9, 92.6)
Rank	Female
Prof	97.8, 139.0, 154.5, 178.5, 207.8 (158.0, 26.7)
Assoc Prof	59.2, 95.5, 107.4, 122.6, 196.0 (111.9, 25.7)
Assist Prof	51.2, 80.0, 86.1, 96.7, 272.3 (91.1, 25.3)
Prof	61.3, 184.9, 212.2, 244.5, 400.1 (220.2, 62.0)
Assoc Prof	106.6, 150.6, 185.5, 230.4, 536.1 (203.5, 76.9)
Assist Prof	62.5, 125.5, 149.4, 188.6, 394.3 (161.1, 53.2)
	Prof Assoc Prof Assist Prof Assoc Prof Assist Prof Assist Prof Assist Prof Assoc Prof Assoc Prof Assoc Prof Assoc Prof Assist Prof

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

Group	Prof	Assoc Prof	Assist Prof	Total
Male	212 [66] (31) (85)	208 [69] (30) (74)	272 [66] (39) (57)	692 [67] (69)
Female	38 [43] (12) (15)	72 [56] (23) (26)	207 [61] (65) (43)	317 [57] (31)
All	250 [61] (25)	280 [65] (28)	479 [64] (47)	1009 [63]

8 Tables of Analysis Results

Table 8: Overall Percent Differences (95% CI) in FTE Salary (FY2009), 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	-3.1 (-5.5, -0.8)	-2.4 (-4.7, -0.1)
Professor	-5.5 (-10.7, -0.4)	-5.5 (-10.5, -0.5)
Associate Professor	-3.7 (-8.2, 0.7)	-2.2 (-6.6, 2.2)
Assistant Professor	-1.8 (-5.0, 1.3)	-1.1 (-4.2, 2.0)
MD degree	-2.4 (-5.2, 0.5)	-1.2 (-4.1, 1.6)
Non-MD degree	-1.6 (-6.0, 2.8)	-1.1 (-5.4, 3.2)
Professor (New)	-7.5 (-17.2, 2.4)	-7.2 (-16.8, 2.4)
Professor (Mid)	-2.8 (-10.1, 4.6)	-1.3 (-8.5, 5.9)
Professor (Long)	-12.5 (-24.6, -0.3)	-15.7 (-27.8, -3.7)
Assoc Prof (New)	-4.8 (-12.0, 2.3)	-2.9 (-9.8, 4.0)
Assoc Prof (Mid)	1.0 (-6.9, 8.9)	2.1 (-5.9, 10.0)
Assoc Prof (Long)	-7.4 (-16.3, 1.5)	-6.3 (-15.1, 2.4)
Assist Prof (New)	-3.3 (-8.8, 2.2)	-1.7 (-7.3, 3.9)
Assist Prof (Mid)	-4.2 (-9.7, 1.3)	-1.6 (-7.0, 3.8)
Assist Prof (Long)	1.8 (-3.6, 7.1)	0.3 (-5.0, 5.7)

Table 9: Overall Percent Differences (95% CI) in TOTAL Salary (FY2009), negative=women earn less than men. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine, and removing Neurosurgery specialty from Surgery.

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	TOTAL Salary	TOTAL Salary*
Overall	-6.1 (-9.1, -3.1)	-4.8 (-7.7, -1.8)
Professor	-8.3 (-14.9, -1.6)	-7.8 (-14.2, -1.5)
Associate Professor	-5.9 (-11.7, -0.1)	-4.0 (-9.6, 1.5)
Assistant Professor	-5.1 (-9.1, -1.1)	-3.8 (-7.7, 0.2)
MD degree	-6.8 (-10.5, -3.1)	-5.1 (-8.7, -1.4)
Non-MD degree	0.9 (-4.9, 6.6)	1.6 (-3.9, 7.2)
Professor (New)	-8.9 (-21.6, 3.8)	-8.8 (-20.9, 3.3)
Professor (Mid)	-6.4 (-15.9, 3.1)	-4.2 (-13.3, 4.9)
Professor (Long)	-15.2 (-30.9, 0.5)	-18.6 (-33.9, -3.4)
Assoc Prof (New)	-6.3 (-15.4, 2.9)	-4.2 (-12.9, 4.5)
Assoc Prof (Mid)	-1.5 (-11.7, 8.6)	0.5 (-9.5, 10.4)
Assoc Prof (Long)	-9.9 (-21.4, 1.6)	-8.3 (-19.3, 2.8)
Assist Prof (New)	-4.8 (-11.9, 2.2)	-1.8 (-8.8, 5.3)
Assist Prof (Mid)	-7.5 (-14.5, -0.4)	-4.1 (-10.9, 2.6)
Assist Prof (Long)	-2.6 (-9.5, 4.2)	-3.9 (-10.7, 2.8)

Table 10: Overall Departmental Percent Differences (95% CI) in FTE Salary (FY2009), 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	-3.1 (-5.5, -0.8)	-6.1 (-9.1, -3.1)
Overall*	-2.4 (-4.7, -0.1)	-4.8 (-7.7, -1.8)
Basic Science	-4.1 (-12.2, 4.0)	-3.9 (-14.4, 6.6)
Neurology	-3.8 (-15.0, 7.4)	-2.9 (-17.5, 11.8)
Medicine	-3.1 (-7.6, 1.5)	-6.2 (-12.1, -0.2)
Medicine*	0.0 (-5.1, 5.0)	-0.8 (-7.3, 5.7)
Opthalmology	-0.8 (-12.8, 11.1)	3.0 (-12.7, 18.6)
Pathology	-8.8 (-18.4, 0.8)	-11.3 (-23.9, 1.3)
Pediatrics	2.1 (-6.1, 10.4)	1.6 (-9.1, 12.3)
Psychiatry	-1.5 (-9.8, 6.8)	-1.9 (-12.7, 9.0)
Surgery	-2.2 (-10.3, 5.8)	-19.1 (-29.6, -8.6)
Surgery*	-0.2 (-8.2, 7.8)	-17.6 (-27.8, -7.5)
Radiology	3.6 (-6.6, 13.7)	2.5 (-10.7, 15.8)
Oncology	-10.1 (-19.5, -0.6)	-11.5 (-23.8, 0.8)
Anesthesiology	-7.8 (-17.1, 1.5)	-10.8 (-22.9, 1.4)
Other	-1.7 (-9.8, 6.5)	-4.4 (-15.0, 6.2)

Table 11: Overall Departmental Differences (95% CI) in FTE Salary (FY2009) 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	-6.0 (-9.3, -2.7)	-14.9 (-20.4, -9.5)
Overall*	-4.5 (-7.8, -1.3)	-12.1 (-17.3, -6.9)
Basic Science	-5.6 (-14.4, 3.2)	-5.4 (-14.3, 3.4)
Neurology	-5.8 (-15.4, 3.7)	-4.3 (-17.3, 8.6)
Medicine	-8.1 (-14.4, -1.8)	-15.9 (-25.4, -6.5)
Medicine*	-3.0 (-8.3, 2.3)	-5.2 (-12.3, 1.8)
Opthalmology	-5.2 (-19.7, 9.2)	3.6 (-40.0, 47.1)
Pathology	-12.8 (-24.8, -0.8)	-19.2 (-38.7, 0.4)
Pediatrics	2.6 (-6.1, 11.3)	1.7 (-7.6, 11.0)
Psychiatry	-3.0 (-10.3, 4.2)	-3.6 (-11.8, 4.6)
Surgery	-4.9 (-19.4, 9.7)	-63.0 (-92.8, -33.2)
Surgery*	-1.6 (-16.9, 13.6)	-60.1 (-85.6, -34.6)
Radiology	1.4 (-9.4, 12.1)	-7.1 (-29.3, 15.1)
Oncology	-17.4 (-32.7, -2.1)	-22.4 (-49.2, 4.5)
Anesthesiology	-14.5 (-32.1, 3.1)	-24.4 (-49.3, 0.4)
Other	2.1 (-12.8, 17.0)	-3.2 (-22.9, 16.5)

Table 12: Percent Differences (95% CI) FTE Salary for FY 2004-2009. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine.

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Department	2004	2005	2006	2007	2008	2009
Overall	-3.	6 (-6.2, -1.0) -2.6 (-5.0, -0.2)	-3.2 (-5.5, -0.9)	-4.0 (-6.3, -1.6)	-3.5 (-6.0, -1.1)	-3.1 (-5.5, -0.8)
Basic Science	-2.5 (-12.3, 7.3)	0.3 (-9.7, 10.3)	-0.8 (-9.7, 8.1)	-1.0 (-9.9, 8.0)	-2.8 (-12.1, 6.5)	-4.1 (-12.2, 4.0)
Neurology	-2.6 (-14.0, 8.8)	-4.6 (-15.8, 6.6)	-5.4 (-15.8, 5.1)	-7.7 (-18.2, 2.8)	-4.5 (-15.4, 6.4)	-3.8 (-15.0, 7.4)
Medicine	-3.3 (-8.5, 1.9)	-3.5 (-8.5, 1.5)	-4.6 (-9.2, 0.1)	-4.7 (-9.2, -0.2)	-5.6 (-10.3, -0.9)	-3.1 (-7.6, 1.5)
Medicine*	-1.6 (-7.4, 4.2)	-1.1 (-6.7, 4.5)	-1.5 (-6.5, 3.4)	-1.6 (-6.5, 3.2)	-2.6 (-7.7, 2.4)	0.0 (-5.1, 5.0)
Opthalmology	-7.1 (-17.3, 3.1)	-8.9 (-19.1, 1.3)	-6.0 (-16.2, 4.3)	-5.8 (-16.5, 4.8)	-0.1 (-12.1, 11.9)	-0.8 (-12.8, 11.1)
Pathology	-1.3 (-11.5, 8.9)	0.4 (-9.6, 10.4)	-5.3 (-14.6, 4.0)	-6.3 (-15.5, 2.8)	-8.0 (-17.8, 1.8)	-8.8 (-18.4, 0.8)
Pediatrics	ı	-1.3 (-10.5, 7.9)	-0.8 (-9.7, 8.2)	-0.5 (-9.5, 8.5)	1.3 (-8.8, 11.4)	2.1 (-6.1, 10.4)
Psychiatry	0.4 (-8.0, 8.8)	-1.0 (-9.4, 7.4)	-0.2 (-8.1, 7.8)	0.4 (-7.4, 8.3)	-2.8 (-11.7, 6.2)	-1.5 (-9.8, 6.8)
Surgery	0.7 (-9.1, 10.5)	-0.3 (-9.3, 8.7)	0.9 (-8.2, 10.1)	-2.2 (-11.2, 6.8)	-0.3 (-9.1, 8.5)	-2.2 (-10.3, 5.8)
Radiology	-2.4 (-13.2, 8.4)	-3.9 (-14.9, 7.1)	-0.5 (-10.8, 9.8)	0.2 (-10.4, 10.8)	2.4 (-8.5, 13.3)	3.6 (-6.6, 13.7)
Oncology	-3.0 (-12.6, 6.6)	-4.9 (-14.3, 4.5)	-5.7 (-14.4, 3.1)	-9.3 (-18.6, -0.1)	-9.2 (-18.9, 0.5)	-10.1 (-19.5, -0.6)
Anesthesiology	-9.8 (-21.0, 1.4)	-3.3 (-14.1, 7.5)	-5.4 (-15.3, 4.4)	-7.1 (-16.8, 2.5)	-7.8 (-17.4, 1.9)	-7.8 (-17.1, 1.5)
Other	-6.9 (-14.5, 0.7) -1.0 (-9.0, 7.0)	-1.0 (-9.0, 7.0)	-2.7 (-10.3, 4.9)	-3.3 (-10.8, 4.2)	1.3 (-6.5, 9.1)	-1.7 (-9.8, 6.5)

Table 13: Percent Differences (95% CI) TOTAL Salary for FY 2004-2009. *Estimated gender differences after removing the Cardiology and GI specialties from Medicine.

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Department	tment	2004	2005	2006	2007	2008	2009
0	Overall	-6.1 (-9.1, -3.1)	-5.7 (-9.1, -2.3)	-8.0 (-11.7, -4.4)	-6.0 (-8.9, -3.1)	-5.7 (-8.8, -2.6)	-6.1 (-9.1, -3.1)
Basic Science	sience	-3.5 (-15.5, 8.5)	-1.7 (-16.1, 12.7)	1.1 (-13.0, 15.1)	-2.0 (-13.4, 9.3)	-3.9 (-15.7, 7.9)	-3.9 (-14.4, 6.6)
Nem	Neurology	-5.1 (-18.9, 8.7)	-2.1 (-18.1, 13.9)	-6.2 (-22.7, 10.4)	-9.2 (-22.6, 4.1)	-3.8 (-17.6, 10.0)	-2.9 (-17.5, 11.8)
Me	Medicine	-5.0 (-11.4, 1.4)	-5.5 (-12.7, 1.7)	-9.2 (-16.5, -2.0)	-6.3 (-12.0, -0.6)	-8.1 (-14.0, -2.1)	-6.2 (-12.1, -0.2)
Med	Medicine*	-2.8 (-10.0, 4.4)	-2.7 (-10.7, 5.3)	-6.7 (-14.6, 1.3)	-2.1 (-8.2, 4.0)	-3.6 (-10.0, 2.8)	-0.8 (-7.3, 5.7)
Opthalmology	ology	-6.9 (-19.3, 5.5)	-8.2 (-22.8, 6.4)	-6.3 (-22.4, 9.9)	-6.0 (-19.5, 7.5)	8.5 (-6.7, 23.7)	3.0 (-12.7, 18.6)
Patk	Pathology	-5.2 (-17.6, 7.2)	-3.6 (-17.8, 10.6)	-10.1 (-24.7, 4.5)	-7.9 (-19.5, 3.7)	-10.3 (-22.8, 2.1)	-11.3 (-23.9, 1.3)
Pedi	Pediatrics	ı	-4.3 (-17.3, 8.7)	-4.1 (-18.3, 10.0)	0.3 (-11.1, 11.7)	2.5 (-10.3, 15.3)	1.6 (-9.1, 12.3)
Psyci	Psychiatry	0.9 (-10.3, 12.1)	-4.9 (-16.7, 6.9)	-6.1 (-18.6, 6.5)	-0.1 (-10.1, 9.9)	-3.1 (-14.4, 8.2)	-1.9 (-12.7, 9.0)
S	Surgery	-7.3 (-19.1, 4.5)	-12.4 (-25.2, 0.4)	-13.4 (-27.8, 1.0)	-11.8 (-23.3, -0.4)	-14.6 (-25.7, -3.5)	-19.1 (-29.6, -8.6)
Rad	Radiology	-10.4 (-23.6, 2.8)	-14.3 (-29.9, 1.3)	-9.1 (-25.4, 7.2)	-4.4 (-17.9, 9.1)	-1.6 (-15.5, 12.2)	2.5 (-10.7, 15.8)
Onc	Oncology	-2.8 (-14.6, 9.0)	-1.8 (-15.2, 11.6)	-9.3 (-23.1, 4.4)	-9.1 (-20.8, 2.7)	-9.2 (-21.5, 3.1)	-11.5 (-23.8, 0.8)
Anesthesiology		-14.0 (-27.6, -0.4)	-4.7 (-20.1, 10.7)	-8.8 (-24.3, 6.7)	-5.7 (-18.0, 6.6)	-6.9 (-19.2, 5.3)	-10.8 (-22.9, 1.4)
	Other	-12.5 (-21.9, -3.1)	-4.1 (-15.5, 7.3)	-10.4 (-22.3, 1.4)	-9.0 (-18.5, 0.5)	-2.4 (-12.3, 7.5)	-4.4 (-15.0, 6.2)

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	107 (91)	10 (9)	117
OB/GYN	8 (18)	37 (82)	45
Neurology	15 (21)	58 (79)	73
Medicine	60 (15)	328 (85)	388
Opthalmology	21 (32)	45 (68)	66
Pathology	22 (25)	66 (75)	88
Pediatrics	15 (13)	101 (87)	116
Psychiatry	48 (40)	73 (60)	121
Surgery	34 (18)	158 (82)	192
Radiology	33 (35)	62 (65)	95
Oncology	24(27)	65 (73)	89
Anesthesiology	11 (10)	97 (90)	108
Art Applied to Medicine	5 (100)	0 (0)	5
History of Medicine	7 (100)	0 (0)	7
Dermatology	3(23)	10 (77)	13
Physical Medicine/Rehab	8 (62)	5 (38)	13
Emergency Medicine	3 (11)	24 (89)	27
Genetic Medicine	8 (47)	9 (53)	17
Radiation Oncology	4 (29)	10 (71)	14
Total	436 (27)	1158 (73)	1594

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

Degree	Prof	Assoc Prof	Assist Prof	Total
Non-MD	132 (30) (32)	112 (26) (26)	192 (44) (25)	436 (27)
MD	279 (24) (68)	317 (27) (74)	562 (49) (75)	1158 (73)
Total	411 (26)	429 (27)	754 (47)	1594

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	2 [3]	0	1 [5]	0	1 [3]	1 [8] (100)
OB/GYN	4 [67]	2 [100] (50)	4 [40]	2 [29] (50)	16 [55]	14 [52] (88)
Neurology	22 [100]	5 [100] (23)	19 [95]	4 [100] (21)	27 [87]	10 [83] (37)
Medicine	57 [59]	8 [44] (14)	66 [62]	15 [45] (23)	101 [55]	46 [53] (46)
Opthalmology	16 [76]	1 [50] (6)	14 [82]	6 [86] (43)	12 [43]	6 [43] (50)
Pathology	33 [94]	6 [75] (18)	25 [89]	10 [91] (40)	22 [88]	11 [79] (50)
Pediatrics	12 [46]	6 [50] (50)	6 [22]	4 [27] (67)	37 [59]	23 [64] (62)
Psychiatry	5 [24]	0	17 [49]	4 [36] (24)	38 [58]	19 [51] (50)
Surgery	34 [83]	0	47 [82]	8 [80] (17)	67 [71]	13 [59] (19)
Radiology	24 [96]	5 [100] (21)	20 [83]	6 [100] (30)	33 [72]	11 [92] (33)
Oncology	30 [88]	5 [83] (17)	26 [93]	5 [83] (19)	25 [93]	14 [93] (56)
Anesthesiology	8 [80]	0	25 [93]	5 [100] (20)	63 [89]	23 [79] (37)
Art Applied to Medicine	0	0	0	0	0	0
History of Medicine	0	0	0	0	1 [50]	1 [100] (100)
Dermatology	1 [50]	0	1 [33]	1 [100] (100)	6 [75]	6 [86] (100)
Physical Medicine/Rehab	0	0	2 [100]	0	8 [80]	5 [83] (62)
Emergency Medicine	0	0	5 [100]	1 [100] (20)	18 [82]	4 [80] (22)
Genetic Medicine	0	0	0	0	0	0
Radiation Oncology	2 [67]	0	2 [50]	1 [100] (50)	4 [57]	0
Total	250 [61]	38 [43] (15)	280 [65]	72 [56] (26)	479 [64]	207 [61] (43)

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

Degree Rank Male

Degree	Rank	Male
Non-MD	Prof	0.2, 3.6, 5.0, 12.5, 25.0 (9.2, 8.4)
	Assoc Prof	0.7, 2.0, 4.5, 6.2, 62.2 (8.0, 12.4)
	Assist Prof	0.1, 2.4, 4.1, 7.0, 21.2 (6.1, 5.9)
MD	Prof	0.1, 5.1, 20.0, 64.6, 724.3 (59.4, 101.6)
	Assoc Prof	0.4, 7.7, 20.1, 50.0, 347.5 (43.1, 58.9)
	Assist Prof	0.3, 8.9, 22.5, 62.5, 310.6 (44.8, 57.4)
Degree	Rank	Female
Degree Non-MD	Rank Prof	Female 2.1, 3.2, 4.5, 12.2, 25.0 (9.0, 8.7)
	Prof	2.1, 3.2, 4.5, 12.2, 25.0 (9.0, 8.7)
	Prof Assoc Prof	2.1, 3.2, 4.5, 12.2, 25.0 (9.0, 8.7) 1.5, 4.0, 5.4, 11.1, 68.9 (12.5, 19.2)
Non-MD	Prof Assoc Prof Assist Prof	2.1, 3.2, 4.5, 12.2, 25.0 (9.0, 8.7) 1.5, 4.0, 5.4, 11.1, 68.9 (12.5, 19.2) 0.2, 3.0, 4.5, 8.0, 44.1 (6.3, 7.6)

Table 18: Overall Differences (95% CI) in FTE Salary (FY2009) 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.

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	FTE Salary	FTE Salary*	
Overall	-6.0 (-9.3, -2.7)	-4.5 (-7.8, -1.3)	
Professor	-16.8 (-24.0, -9.6)	-16.1 (-23.2, -9.0)	
Associate Professor	-5.0 (-11.7, 1.7)	-2.3 (-9.0, 4.4)	
Assistant Professor	-2.8 (-7.2, 1.7)	-1.5 (-5.8, 2.9)	
MD degree	-6.4 (-10.6, -2.2)	-4.3 (-8.5, -0.2)	
Non-MD degree	1.4 (-4.7, 7.4)	2.2 (-4.2, 8.5)	
Professor (New)	-16.5 (-27.3, -5.8)	-15.0 (-25.7, -4.3)	
Professor (Mid)	-13.8 (-24.1, -3.5)	-10.0 (-20.1, 0.1)	
Professor (Long)	-26.0 (-57.6, 5.7)	-33.3 (-64.8, -1.8)	
Assoc Prof (New)	-6.2 (-16.8, 4.4)	-2.6 (-12.8, 7.7)	
Assoc Prof (Mid)	1.6 (-10.9, 14.1)	3.6 (-9.1, 16.3)	
Assoc Prof (Long)	-11.8 (-22.6, -1.1)	-9.5 (-20.7, 1.6)	
Assist Prof (New)	-6.4 (-13.8, 1.0)	-3.5 (-10.9, 3.9)	
Assist Prof (Mid)	-2.0 (-9.7, 5.6)	1.0 (-6.5, 8.5)	
Assist Prof (Long)	-0.9 (-9.1, 7.4)	-2.2 (-9.9, 5.5)	

Table 19: Overall Differences (95% CI) in Total Salary (FY2009) 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	-14.9 (-20.4, -9.5)	-12.1 (-17.3, -6.9)
Professor	-30.2 (-42.8, -17.6)	-27.9 (-40.3, -15.5)
Associate Professor	-10.4 (-22.0, 1.1)	-7.0 (-17.3, 3.4)
Assistant Professor	-11.3 (-18.8, -3.8)	-8.7 (-16.0, -1.4)
MD degree	-20.3 (-27.6, -13.1)	-16.4 (-23.4, -9.5)
Non-MD degree	10.7 (2.3, 19.1)	11.8 (3.2, 20.4)
Professor (New)	-21.7 (-43.3, -0.2)	-21.1 (-42.5, 0.3)
Professor (Mid)	-33.9 (-54.2, -13.6)	-26.0 (-46.0, -6.1)
Professor (Long)	-40.4 (-78.5, -2.2)	-49.4 (-86.9, -11.9)
Assoc Prof (New)	-9.6 (-28.8, 9.6)	-6.5 (-23.0, 9.9)
Assoc Prof (Mid)	-6.0 (-26.3, 14.2)	-1.0 (-20.1, 18.1)
Assoc Prof (Long)	-18.9 (-34.6, -3.1)	-14.8 (-30.1, 0.6)
Assist Prof (New)	-10.4 (-22.3, 1.5)	-3.4 (-14.0, 7.2)
Assist Prof (Mid)	-9.2 (-21.4, 3.1)	-4.6 (-16.5, 7.3)
Assist Prof (Long)	-15.2 (-29.9, -0.5)	-16.9 (-31.2, -2.7)