

# University of California, San Francisco—School of Pharmacy

## Faculty Salary Equity Review 2024

### Background

Since 2014, the University of California, San Francisco has engaged in a campus-wide analysis of faculty salaries, known as the Faculty Salary Equity Review (FSER), to assess for evidence of imbalances in faculty salary by gender and underrepresented minority (URM) status.

To date, the School of Pharmacy (SoP) has completed five analyses (2015, 2017, 2018, 2019, 2022), each finding no significant imbalances with respect to salaries by gender or URM status. This report presents the results of the biennial FSER for the fiscal year 2023-2024 in the SoP, which consists of two basic science departments (Bioengineering & Therapeutic Sciences {BTS} and Pharmaceutical Chemistry {PC}) and one clinical department (Clinical Pharmacy {CP}).

### Methods

Faculty salary datasets for the SoP were provided by the UCSF Office of Academic Affairs. Consistent with previous reviews, all paid faculty appointed at 75% full-time equivalent or greater were included in the analysis. Data for this review included the following elements:

1. X+Y salary (7/1/2023 – 6/30/2024)
2. Z-payments (7/1/2022 – 6/30/2023)
3. Degree type (Clinical Doctorate, Research Doctorate, Combination Doctoral Degrees)
4. Gender (female, male, unknown)
5. URM status (as defined by the campus including the following racial and ethnic groups: American Indian/Alaska Native, Black/African American, Filipino, Hawaiian/Pacific Islander, Hispanic/Latinx, Hmong, and Vietnamese).
6. Accelerated advancements (7/1/2014 – 7/1/2023)
7. Faculty series, rank, and step
8. Academic department (BTS, CP, PC)

Multiple linear regression analyses were conducted to test for imbalance in the salary between male and female faculty members and between URM and non-URM faculty members. The primary outcome, the sum of X + Y pay, was logarithmically transformed for analysis to satisfy the conditions of linear regression. The coefficients from linear regression models were back-transformed to fold-effects using the equation  $\exp(\text{coefficient}) = \text{fold-effect}$ . As a first step, univariate regression models for all predictors were fit in association with the primary outcome. Then, a forward stepwise selection of variables was performed for each outcome with  $p < 0.1$  required for inclusion. A final model was selected using all available data that met the *a priori* threshold for statistical significance of 0.05. Then, each predictor was added in a stepwise manner to this final model. Each variable was evaluated assuming an additive model. The model with the smallest p-value was retained. This was repeated until no remaining variable met the *a priori* threshold for statistical significance of 0.05.

The results are reported with unadjusted and adjusted estimates of the relative ratio with 95% confidence intervals (CI). Covariables included in the adjusted models were series (Ladder Rank, In Residence, Clin X, HS Clinical and Adjunct), step (1-9 and Above Scale), rank (Assistant, Associate, Full), doctoral degree type, and department.

If an imbalance of >4% was detected by median Y pay ratios, then a matched pair analysis was conducted at the department level based on series, rank, and step. Department Chairs were provided with the matched pairs, and an explanatory response for any potential imbalance in Y salary was requested. Department Chairs were also queried regarding their faculty salary-setting processes.

The campus provided a residuals analysis and flagged individual faculty salaries (X+Y) that were either low outliers (<75%) or high outliers (>140%) of the X+Y salary predicted by the campus model. Explanations for these differences were obtained from the Department Chairs.

The presence of any Z-payment (clinical or administrative stipend) and amount (median Z-payment) were compared between male and female faculty members and between URM and non-URM faculty members using the two-tailed, t-test. Residual analyses were conducted to determine the difference between the actual Z-payment (clinical or administrative) and the Z-payment predicted by the campus model. The presence of an accelerated advancement action was compared between male and female faculty members and between URM and non-URM faculty members using the two-tailed, t-test.

Statistical significance for all analyses was set at  $p \leq 0.05$ . All analyses were conducted using R Studio, Version 2023.06.1.

## Results

A total of 70 faculty members in the SoP met the campus FSER inclusion criteria for analysis. The distribution of faculty by department was as follows: CP (n=33), PC (n=22), and BTS (n=15). Among these, 35 faculty members (50.0%) identified as female, 32 (45.7%) as male, and three (4.3%) as unknown gender. Thirteen (18.6%) faculty members were classified as URM, and 57 (81.4%) as non-URM. See Appendix for additional characteristics of SoP faculty included in this analysis.

### **Academic Rank**

#### *Gender*

The majority of faculty in the school (n=50; 71.4%) were at the Full Professor rank. When stratified by gender, the proportion of males at the Full Professor rank (81.3%; n=26) was greater than that for females (62.9%; n=22) and faculty of unknown gender (66.7%; n=2). The proportion of females at the Associate Professor rank (20.0%; n=7) and Assistant Professor rank (17.1%; n=6) was higher than that for males at the Associate Professor rank (15.6%; n=5) and Assistant Professor rank (3.1%; n=1).

#### *URM Status*

The proportion of non-URM faculty at the Full Professor rank (77%; n=57) was greater than URM faculty (46.2%; n=6). The proportion of URM faculty at the Associate Professor rank (30.8%; n=4) and Assistant Professor rank (23.1%; n=3) was higher than that for non-URM faculty at the Associate Professor rank (15.8%; n=9) and Assistant Professor rank (7.0%; n=4).

### **Doctoral Degree Type**

#### *Gender*

When stratified by gender, the proportion of males with a research doctoral degree (81.3%; n=26) was greater than that for females (37.1%; n=13) and faculty of unknown gender (33.3%; n=1). Females (51.4%; n=18) and faculty of unknown gender (66.7%; n=2) were more likely to hold a clinical doctoral degree than males (9.4%; n=3). The proportion of faculty with dual doctoral degrees was similar among females (11.4%; n=4) and males (9.4%; n=3).

### *URM Status*

The proportion of non-URM faculty with a research doctoral degree (61.4%; n=35) was greater than URM faculty (46.2%; n=6). URM faculty were more likely to hold a clinical doctoral degree (46.2%; n=6) than non-URM faculty (29.8%; n=17). The proportion of faculty with dual doctoral degrees was similar among URM faculty (7.7%; n=1) and non-URM faculty (8.8%; n=5).

### ***X+Y Salary***

#### *Gender*

The median annual X+Y salary for female faculty was \$214,000 and \$252,050 for male faculty. The unadjusted female-to-male ratio of X+Y salary was 0.82 (95% CI: 0.73–0.92) which was statistically significant ( $p=0.002$ ). However, after adjusting for series, rank, step, doctoral degree type, and department, the female-to-male X+Y salary ratio was **1.02 (95% CI: 0.96–1.08)**, which was not statistically significant ( $p=0.6$ ).

After stratifying by department and adjusting for series, rank, step, doctoral degree type, and department, the female-to-male X+Y salary ratio was not statistically significant for all three departments (Table 1).

**Table 1. Adjusted Female-to-Male X+Y Salary Ratio by SoP Department**

Department	Female/Male Ratio	95% CI	p-value
Bioengineering & Therapeutic Sciences	0.95	(0.73, 1.24)	0.69
Clinical Pharmacy	1.02	(0.90, 1.16)	0.73
Pharmaceutical Chemistry	0.95	(0.67, 1.34)	0.76

Matched-pair analyses were conducted on five faculty pairs with a Y salary imbalance greater than 4% between male and female faculty in the same series, rank, step, and department. In three cases, the female faculty member received a lower Y salary compared to the matched male comparator; Y salary gap amounts were \$4,450, \$4,605, and \$30,030. Department Chairs attributed higher male Y salaries to teaching awards, research funding support, and substantial administrative responsibilities in a faculty member with a joint appointment outside the SoP (i.e., Y salary negotiated and set by the School of Medicine). In two cases, the female faculty member received a higher Y salary compared to the matched male comparator; Y salary gap amounts were \$8,490 and \$38,820. In both instances, higher female Y salaries were justified by more research funding support.

### *URM Status*

The median annual X+Y salary for URM faculty was \$212,240 and \$251,107 for non-URM faculty. The unadjusted URM-to-non-URM ratio of X+Y salary was 0.84 (95% CI: 0.72–0.99) which was statistically significant ( $p=0.035$ ). However, after adjusting for series, rank, step, doctoral degree type, and department, the URM to non-URM X+Y salary ratio was **0.99 (95% CI: 0.94–1.05)**, which was not statistically significant ( $p=0.82$ ).

After stratifying by department and adjusting for series, rank, step, doctoral degree type, and department, the female-to-male X+Y salary ratio was not statistically significant for all three departments (Table 2).

**Table 2. Adjusted URM-to-Non-URM X+Y Salary Ratio by SoP Department**

Department	Female/Male Ratio	95% CI	p-value
Bioengineering & Therapeutic Sciences	1.07	(0.75, 1.54)	0.68
Clinical Pharmacy	0.96	(0.87, 1.06)	0.44
Pharmaceutical Chemistry	0.80	(0.50, 1.29)	0.88

Matched-pair analyses were conducted on four faculty pairs with a Y salary imbalance greater than 4% between URM and non-URM faculty in the same series, rank, step, and department. In three cases, the URM faculty member received a higher Y salary compared to the matched non-URM comparator; Y salary gap amounts were \$5,800, \$20,000, and \$73,740. Department Chairs attributed higher URM faculty member Y salaries to recruitment incentives, research funding support, and market forces (e.g., physician faculty member). In one case, a URM female faculty member received a lower Y salary (\$6,200) compared to a non-URM-matched female comparator. The higher non-URM salary was justified by a recruitment incentive and increased teaching service.

### Z-payments (Clinical or Administrative Stipend)

#### *Gender*

Twenty-one of 35 female faculty members (60%) received one or more Z-payments (median \$6,000). Twelve of 32 male faculty members (37.5%) received one or more Z-payments (median \$14,437). The difference in the means of the presence of a Z-payment between male and female faculty members was not statistically significant ( $p=0.07$ ). Similarly, the difference in the median amount of the Z-payment between male and female faculty members was not statistically significant ( $p=0.18$ ).

#### *URM Status*

Eight of 13 URM faculty members (61.5%) received one or more Z-payments (median \$10,312). Twenty-eight of 57 non-URM faculty members (49.1%) had one or more Z-payments (median \$7,499). The difference in the means of the presence of a Z-payment between URM and non-URM members was not statistically significant ( $p=0.43$ ). The difference in the median amount of the Z-payment between male and female faculty members was not statistically significant ( $p=0.74$ ).

### Accelerated Advancement

#### *Gender*

Seventeen of 35 female faculty members (48.6%) and 19 of 32 male faculty members (59.4%) received an accelerated advancement between 2014-2023. The difference in the means of accelerated advancement between male and female faculty members was not statistically significant (two-tailed, t-test  $p=0.38$ ).

#### *URM Status*

Six of 13 URM faculty members (46.1%) and 30 of 57 non-URM faculty members (52.6%) received an accelerated advancement between 2014-2023. The difference in the means of accelerated advancement between URM and non-URM faculty members was not statistically significant (two-tailed, t-test  $p=0.38$ ).

### High and Low Salary Outliers

No faculty members were flagged as high-salary outliers, while one male faculty member was identified as a low-salary outlier. This individual holds dual doctoral degrees (clinical/research) but does not engage in patient care activities. His salary is equitable when compared with other research faculty in the department at the same rank.

### **Z-Payment Outliers (Clinical or Administrative Stipend)**

No faculty members were flagged as low Z-payment outliers, while five faculty members were identified as high Z-payment outliers. Three faculty members receive clinical Z-payments for service to UCSF Health. These same individuals also receive academic stipends for leadership roles in the School of Pharmacy Dean's Office or the Department of Clinical Pharmacy. Two faculty members receive clinical Z-payments for leadership roles in the UCSF Medication Outcomes Center.

### **Salary Adjustments**

Based on the findings of the matched pair analysis one Department Chair made two salary adjustments. One female faculty member will receive a \$4,500 increase in the Y salary for parity with a male faculty member based on comparable teaching service and awards. A URM female faculty member will receive a \$5,000 increase in the Y salary for parity with a non-URM female faculty member for parity with teaching administration roles. Both salary adjustments will be effective retroactive to 7/1/2023.

### **Summary**

After adjustment for department, series, rank, step, and doctoral degree type there were no statistically significant differences in X+Y salary, Z-payments, and accelerated advancements between female and male faculty or between URM and non-URM faculty in the SoP. Fourteen matched pairs analyses were conducted to account for imbalances in X+Y salary and Z-payment outliers based on gender or URM status. The majority (86%) of imbalances were explained at the department level by non-discriminatory, legitimate business practices (e.g., research funding, clinical activities, administrative responsibilities, or teaching volume/awards). Imbalances detected in matched pair analyses led to Y salary adjustments for two faculty members (both female and URM) to address inequities based on gender or URM status.

### **SoP Action Plan**

- Distribute results from the 2024 FSER to all three departments in the SoP and present findings at the July 2024 Full Faculty meeting.
- Continue to prospectively monitor X+Y salaries and Z-payments for equity based on gender and URM status for new hires and during annual reviews with department chairs.
- Departments should continue to employ transparent and defensible processes for determining the negotiable Y component of faculty salaries. This includes:
  - Ensuring that equity is maintained among faculty at the same series, rank, and step when adjustments are made to Y salaries.
  - In addition to research funding and receipt of major honors/awards, exceptional contributions to other pillars of the University mission (e.g., teaching and service) should be considered when determining Y salaries.
- Maintain efforts to promote equitable opportunities for school and departmental leadership roles associated with Z-payments.
- Continue to monitor accelerated advancements for equity across the SoP faculty.
  - The SoP will review and revise accelerated advancement guidelines for 2024-2025.

### Appendix: Characteristics of UCSF School of Pharmacy Faculty Members

	Sex			URM Status		SoP Total (n=70)
	Female (n=35)	Male (n=32)	Unknown (n=3)	URM (n=13)	Non-URM (n=57)	
<b>Series</b>						
Ladder Rank	9 (25.7%)	25 (78.1%)	1 (33.3%)	6 (46.2%)	29 (50.9%)	35 (50.0%)
In Residence	2 (5.7%)	4 (12.5%)	0	0	6 (10.5%)	6 (8.6%)
Clinical X	15 (42.9%)	3 (9.4%)	0	5 (38.5%)	13 (22.8%)	18 (25.7%)
HS Clinical	7 (20.0%)	0	2 (66.7%)	1 (7.7%)	8 (14.0%)	9 (12.9%)
Adjunct	2 (5.7%)	0	0	1 (7.7%)	1 (1.8%)	2 (2.9%)
<b>Rank</b>						
Assistant	6 (17.1%)	1 (3.1%)	0	3 (23.1%)	4 (7.0%)	7 (10.0%)
Associate	7 (20.0%)	5 (15.6%)	1 (33.3%)	4 (30.8%)	9 (15.8%)	13 (18.6%)
Full	22 (62.9%)	26 (81.3%)	2 (66.7%)	6 (46.2%)	44 (77.2%)	50 (71.4%)
<b>Doctoral degree type</b>						
Clinical	18 (51.4%)	3 (9.4%)	2 (66.7%)	6 (46.2%)	17 (29.8%)	23 (32.9%)
Research	13 (37.1%)	26 (81.3%)	1 (33.3%)	6 (46.2%)	35 (61.4%)	41 (58.6%)
Combination	4 (11.4%)	3 (9.4%)	0	1 (7.7%)	5 (8.8%)	6 (8.6%)
<b>Department</b>						
BTS	5 (14.3%)	10 (31.3%)	0	4 (30.8%)	11 (19.3%)	15 (21.4%)
CP	27 (77.1%)	4 (12.5%)	2 (66.7%)	8 (61.5%)	25 (43.9%)	33 (47.1%)
PC	3 (8.6%)	18 (56.3%)	1 (33.3%)	1 (7.7%)	21 (36.8%)	22 (31.4%)
<b>X+Y Salary (\$)</b>						
Mean ± SD	219,907 ± 49,987	271,660 ± 75,476	227,467 ± 52,824	213,240 ± 64,650	251,107 ± 66,360	243,889 ± 67,325
Median	214,000	252,050	242,700	178,000	239,700	230,250
<b>Z-payment</b>						
Mean ± SD	10,463 ± 12,247	16,320 ± 11,544	4,000 ± 1,000	12,984 ± 9,838	11,560 ± 12,536	11,890 ± 11,894
Median	\$6,000	14,437	4,000	10,213	7,500	7,500
≥1 payment (n; %)	21 (60.0%)	12 (37.5%)	3 (100%)	6; (46.2%)	30 (52.6%)	36 (51.4%)
<b>Accelerated advancement</b>						
Yes (%)	17 (48.6%)	19 (59.4%)	0	6 (46.2%)	30 (52.6%)	36 (51.4%)