## 2018 UCSF Faculty Salary Equity Review (FSER) Report

## Executive Summary

This is the fourth report of the Faculty Salary Equity Review (FSER) Committee to address potential salary inequity by gender and underrepresented minority (URM) status. Prior reports are available on the UCSF Academic Affairs website (http://tiny.ucsf.edu/fser).

At the request of Chancellor Hawgood, the FSER Committee was reconvened in December 2017 with the following charges:

1. Review the action plans submitted by the Schools and provide the Chancellor with recommendations based on these reports.
2. If needed, consider changes to the methodology and/or data capture for the salary equity analysis with the goal of improving future analyses.

Prior to reconvening the Committee, a campus-level analysis of salaries was conducted using a methodology similar to that described in the January 2015 FSER report. The main findings were:

Female/Male: A statistically significant imbalance in salary ( $X+Y$ ) was found, with females receiving 3\% lower salaries compared to males. There was no statistically significant imbalance by gender in the presence of a clinical incentive $(Z)$ payment. However, among those who received a $Z$ payment, a statistically significant imbalance in the $Z$ amount was found, with females receiving a lower (29\%) Z compared to males. There were no statistically significant imbalances by gender in the presence of accelerated academic advancements.

URM/Non-URM: A statistically significant imbalance in salary ( $X+Y$ ) was found, with URM faculty receiving $3 \%$ lower salaries compared to non-URM faculty. No statistically significant imbalances by URM status were found in the presence of or amount of clinical incentives $(Z)$, nor in the presence of accelerated academic advancements.

In addition to the above analysis, predicted salaries $(X+Y)$ were calculated based on a model that included department, academic series, rank, step, and doctorate type. Residuals, defined as the ratio of the actual salary divided by the predicted salary, were generated for individuals. Men were overrepresented compared to women among those earning more than $140 \%$ of the model-predicted salary ("high outliers," approximately the top 5\%) and among those earning less than $75 \%$ of the modelpredicted salary ("low outliers," approximately the bottom $5 \%$ ). When the high outliers were removed, the campus-level finding of salary inequity by gender was no longer statistically significant. These data and results were distributed to each school for further analysis.

Charge 1: The Committee reviewed and evaluated the action plans of each school. No salary inequities were identified by the School of Dentistry and the School of Pharmacy. On the basis of identified inequities, upward salary adjustments were made for two female faculty members in the School of Medicine ( $\$ 59,200$ for one; $\$ 25,100$ for the other) and one female faculty member in the School of Nursing (\$29,700). Salary adjustments were made retroactive to 07/01/17.

Data Set: Salary (X+Y) data from FY18 (July 1, 2017-June 30, 2018) and Z salary payments

Based upon review of the action plans, the Committee makes the following observations and recommendations:

- There is a lower proportion of women than men among those with high outlier salaries based on a model prediction. Among these high outliers, fewer women than men were identified as having a leadership role that contributed to their salary.
- There is a higher proportion of women than men in lower paying sub-specialty areas.
- For future salary equity analyses:
- High outliers: schools/departments will be expected to report on leadership positions that contribute to salary, including a description of any search process that led to the individual being appointed to the leadership role. Matched pair analyses will be required for those who do not have a leadership position that contributes to salary.
- Low outliers: schools/departments will be expected to conduct matched pair analyses for all individuals in this group.
- For departments/divisions of 50 or more faculty, a statistical analyses of $X+Y$ and $Z$ compensation will be expected to assess salary imbalance by gender and URM status.
- Schools are required to develop guidelines for stipends paid for administrative roles. Effective 7/1/19, new administrative stipends will be paid as $Z$ payments and not as a component of the annually negotiated salary $(\mathrm{Y})$ amount.
- Leadership roles (defined as those roles that contribute to high outlier salaries) should be made following a national search, a broadly communicated internal UCSF search or some other process that is well-documented.
- When the schools provide specific actions they plan to take for the following year, the Committee will expect the schools to report on progress made when the next action plan is produced.

Charge 2: Per the UCSF Office of Diversity and Outreach definitions, faculty who self-identify as Vietnamese will be included among URM faculty for future FSER analyses. If/when UC employment forms allow for self-identification of Hmong faculty, they will also be included among URM faculty.

The Committee also reaffirms the importance of regular ongoing salary equity analyses and monitoring.

## Background

As has been done for each academic year since 2015-2016, the four UCSF health professional schools continued their work to examine evidence of inequities in faculty salaries by underrepresented minority status (URM) and by gender (female, male). In each of the FSER reports, similar criteria have been used to generate school-level data for further analysis and there has been consistency in the core methodologies applied for these analyses.

Information on salary adjustments made in prior years can be found in the faculty salary equity reports on the Academic Affairs website (http://tiny.ucsf.edu/fser).

For the academic year 2017-2018, a campus-level analysis of salary by gender and URM status was conducted and salary imbalances ${ }^{1}$ by gender and URM status were again identified. In addition, a campus-level residuals analysis was conducted to identify salary "outliers" after adjustments for rank, step, type of doctorate, series and department/school were made.

Predicted salaries $(X+Y)$ were calculated based on a model that included department, academic series, rank, step, and doctorate type. Residuals, defined as the ratio of the actual salary divided by the predicted salary, were generated for individuals. For the residual analysis, "high outliers" were defined as those earning more than $140 \%$ of the model-predicted salary. This closely represented the top $5 \%$ of salaries. The results of this analysis suggested that high outlier salaries were contributing substantially to the campus-level imbalances. The residual salary data was subsequently distributed to the schools.

The FSER Committee convened on December 12, 2017 to align the committee on charge, activities, and outcomes for the 2018 report, as well as to review the residual analysis. At that time, the Committee requested that the schools examine the high outliers to assess select factors that might contribute to these above-predicted salaries. In addition, the schools were requested to provide information regarding low outliers-i.e., those who earned less than $75 \%$ of the predicted salary amount, which closely represented the bottom $5 \%$ of salaries.

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## I. Overall Campus Analysis Results

Multiple views of the data for both gender and URM status were generated. There were gender- and URM status-based imbalances identified and those findings are included here. Additional campus analyses tables are included in Appendix F.

## Gender

1. Gender-based imbalances in $X+Y$ payment ratio were identified at the campus level, within the School of Medicine, and within a campus-level grouping of clinical departments.

## Table 1. Adjusted Female/Male $X+Y$ payment ratio

| Adjusted ratios* | Ratio | Confidence interval |
| :---: | :---: | :---: |
| Overall | 0.97 | (0.95, 0.99) |
| By school |  |  |
| Dentistry | 0.99 | (0.91, 1.10) |
| Medicine | 0.96 | (0.94, 0.98) |
| Nursing | 0.91 | (0.77, 1.07) |
| Pharmacy | 1.00 | (0.90, 1.10) |
| Department Type ${ }^{1}$ |  |  |
| Basic Science | 1.00 | (0.94, 1.06) |
| Clinical | 0.96 | (0.94, 0.98) |

'Adjusted for rank, step, type of doctorate, and series.
2. No gender-based imbalance in the presence of a clinical incentive $Z$ payment was found (Appendix F, Table 1).
3. Among faculty who received a clinical incentive $Z$ payment, there was a gender-based imbalance in the amount of $Z$.

Table 2. Adjusted female/male payment ratio among those with a Z payment

| Adjusted ratios* | Ratio | Confidence interval |
| :---: | :---: | :---: |
| Overall | 0.71 | (0.62, 0.82) |
| By school |  |  |
| Dentistry | 0.33 | (0.05, 2.22) |
| Medicine | 0.72 | (0.62, 0.83) |
| Nursing |  | Insufficient data |
| Pharmacy |  | Insufficient data |

'Adjusted for rank, step, type of doctorate, series, and department/school.

[^1]4. No gender-based imbalance in the presence of an accelerated advancement (July 2014-July 2017) was found (Appendix F, Table 2).

## URM Status

1. Imbalances in $X+Y$ payment ratio were identified based on URM/non-URM status at the campus level, within the School of Medicine, and within a campus-level grouping of clinical departments.

Table 3. Adjusted URM/non X+Y payment ratio

| Adjusted ratios* | Ratio | Confidence interval |
| :---: | :---: | :---: |
| Overall | 0.97 | (0.94, 0.998) |
| By school |  |  |
| Dentistry | 1.04 | (0.88, 1.22) |
| Medicine | 0.97 | (0.93, 0.995) |
| Nursing | 0.98 | (0.88, 1.10) |
| Pharmacy | 1.00 | (0.88, 1.10) |
| Department Type |  |  |
| Basic Science | 0.99 | (0.89, 1.09) |
| Clinical | 0.97 | (0.93, 0.997) |

*Adjusted for rank, step, type of doctorate, and series.
2. No imbalance in the presence of a clinical incentive $Z$ payment was found based on URM/nonURM status (Appendix F, Table 3).
3. No imbalance in accelerated advancement (July 2014-July 2017) was found based on URM/nonURM status (Appendix F, Table 4).

## II. Residual Analysis Results

Predicted salary ( $\mathrm{X}+\mathrm{Y}$ ) was calculated based on a model that included department, academic series, rank, step, and doctorate type. Residuals were defined as the ratio of the actual salary divided by the predicted salary, so that values less than 1 are salaries less than what was predicted based on department, academic series, rank, step, and doctorate type, and values greater than 1 are salaries greater than predicted. Figure 1 below shows a box-and-whisker plot of the residuals separated by gender. In such a plot the shaded rectangle represents the $25^{\text {th }}$ percentile, median, and $75^{\text {th }}$ percentile with horizontal lines, and the dots represent outliers. Figure 1 shows that men are over-represented in the extreme residuals (both low and high) but especially in salaries that are quite a bit higher than predicted. When the top $5 \%$ of salaries were removed, the campus-level salary inequity by gender was no longer significant.

Figure 1. Actual above predicted $X+Y$ pay box-whisker plot.


The Committee requested that the schools provide additional analysis on the high outliers and low outliers. "High outliers" were defined as those earning more than $140 \%$ of the model-predicted salary. This closely represented the top $5 \%$ of salaries. "Low outliers" were defined as those earning less than $75 \%$ of the model-predicted salary.

The schools were asked to respond to the following questions for the high outliers:

1. Is the home department in control of setting this individual's salary? (Y/N)
a. If No, what is the name and role of the person setting the salary?
2. Does holding a leadership position contribute to this compensation? (Y/N)
a. If Yes, what is the leadership role?
b. If Yes, was this leadership position searched? (Y/N)

For low outliers, schools were asked to conduct a matched-pair analysis. Since these individuals were identified on the basis of pay, the request was to match based on rank, step, and department (division, if possible). Schools were also asked to provide explanations for salary differences and these explanations are summarized for each school.

## A. School of Dentistry

## High Outlier Salaries ( $\mathrm{N}=9$ )

- Does a leadership position contribute to salary?...
- Five (5) of the nine (9) have leadership positions. Of these five: 2 Male / 3 Female; 4 Non-URM / 1 URM
- ...and if so, was position searched?
- Four (4) of the five (5) leadership positions were searched.

Of these four: 1 Male / 3 Female; 3 Non-URM / 1 URM

- Was home department in control of setting salary? And if not, provide role of the person who set the salary.
- Two (2) of the nine (9) had salaries set outside of the home department and were set by the dean. One position is an associate dean and one is a division chair.

Of these two: 2 Female; 2 Non-URM

## Low Outlier Salaries ( $\mathrm{N}=12$ )

There were several categories of explanations for salary differences found in the low outlier matchedpairs:

1. No Y salary component
2. $Z$ payment was not considered in the analysis and if it had been considered the actual salary would have been in line with the model-predicted salary
3. Market rates driving lower values for faculty salaries.
4. Clinical specialty differences in revenue generation potential
5. Differences in scale (since different scales within a department was not considered in the analyses)

## B. School of Medicine

High Outlier Salaries ( $\mathrm{N}=106$ )
According to information provided by the departments, one quarter (27/106) of individuals who were identified as high outliers have their salary set outside the department, most commonly for medical center leadership roles. Nearly half of high outliers $(45 \%, 48 / 106)$ were identified as holding a leadership role that contributes to compensation. Half of all high outliers have their salary set within the department but do not hold a leadership role that contributes to compensation.

For faculty members who were identified as high outliers and for whom a leadership role contributes to compensation, two-thirds were reported to have been appointed through a search process. Among the group of high outliers that had been searched into a leadership role, $16 \%$ were women. Among the group of high outliers that had not been searched into a leadership role, $31 \%$ were women.

- Does a leadership position contribute to salary?...
- 48 of the 106 (106) have leadership positions:

Of these 48: 38 Male / 10 Female; 44 Non-URM / 4 URM

- 32 of the 48 leadership positions were searched:

Of these 32: 27 Male / 5 Female ; 29 Non-URM / 3 URM

- 16 of the 48 leadership positions were not searched:

Of these 16: 11 Male / 5 Female; 15 Non-URM / 1 URM

Figure 2. Percentage distribution of high outliers in the School of Medicine whose salaries were set outside the department, according to information provided by the department.

| High Outlier Salaries Set Outside the Department |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 (25\%) |  |  |  |  |  |  |

Total SOM faculty with high outlier salaries: $\mathrm{N}=106$

## Low Outlier Salaries ( $\mathrm{N}=129$ )

Department chairs and managers were asked to provide information about how salaries were set for the 129 faculty members who were identified as low salary outliers. Slightly more than one-third ( $37 \%$ ) were female and $9 \%$ were URM.

According to the departments, the primary reasons for lower-than-predicted salaries were:

- "Paid to role" (72\%)—salaries limited by funding sources. This included faculty with clinical doctorates who have limited or no clinical duties and faculty whose salary was limited by the availability of grant support.
- Lower market-based compensation (9\%)-this category included faculty who work in specialties where the market pay is lower than the department's usual salary (e.g., non-procedural clinicians in surgical departments).
- The remaining low outliers (19\%) were explained by faculty who opted for higher clinical incentives $(Z)$ instead of higher fixed compensation ( $\mathrm{X}+\mathrm{Y}$ ), compensation that was not captured in this analysis (e.g., VA clinical compensation), and faculty who were on leave at the time data was produced so salary rate was understated.

Figure 3. School of Medicine results of matched-pair analysis for low outlier faculty.

|  | Primary reasons for lower-than-predicted salaries |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paid to Role 93 (72\%) |  | Market Pay Lower 12 (9\%) |  | Responsibilities/ Performance 7(5\%) |  | Higher Y in Lieu of Higher Z 5 (4\%) |  | $\begin{aligned} & \text { Other } \\ & 12 \text { (10\%) } \end{aligned}$ |  |
| Gender | $\begin{gathered} \text { Male } \\ 63 \\ (68 \%) \end{gathered}$ | Female 30 (32\%) | $\begin{gathered} \text { Male } \\ 9 \\ (75 \%) \end{gathered}$ | $\begin{gathered} \text { Female } \\ 3 \\ (25 \%) \end{gathered}$ | $\begin{gathered} \text { Male } \\ 4 \\ (57 \%) \end{gathered}$ | Female 3 (43\%) | $\begin{gathered} \text { Male } \\ 4 \\ (80 \%) \end{gathered}$ | Female <br> (20\%) | $\begin{gathered} \text { Male } \\ 7 \\ (58 \%) \end{gathered}$ | $\begin{gathered} \text { Female } \\ 5 \\ (42 \%) \end{gathered}$ |
| URM Status | NonURM 88 (95\%) | $\begin{gathered} \text { URM } \\ 5 \\ (5 \%) \end{gathered}$ | NonURM 9 (75\%) | $\begin{gathered} \text { URM } \\ 3 \\ (25 \%) \end{gathered}$ | NonURM 6 (86\%) | $\begin{gathered} \text { URM } \\ 1 \\ (14 \%) \end{gathered}$ | $\begin{gathered} \text { Non- } \\ \text { URM } \\ 5 \\ (100 \%) \end{gathered}$ | $\begin{gathered} \text { URM } \\ 0 \\ (0 \%) \end{gathered}$ | NonURM 9 (75\%) | $\begin{gathered} \text { URM } \\ 3 \\ (25 \%) \end{gathered}$ |

Total SOM faculty with low outlier salaries: $\mathrm{N}=129$

One department identified two female faculty low outlier salaries for which there were no explanations. The department made retroactive salary adjustments to correct the imbalances effective 07/01/17 (\$59,200 for one individual; $\$ 25,100$ for the other).

## C. School of Nursing

High Outlier Salaries ( $\mathrm{N}=3$ )

- Does a leadership position contribute to salary?...
- Two of the three faculty members have leadership positions

Of these two: both female; 1 Non-URM / 1 URM

- ...and if so, was position searched?
- Both were searched
- Was home department in control of setting salary and if not, provide role?
- All three faculty had their salary set by the home department.


## Low Outlier Salaries ( $\mathrm{N}=1$ )

One female faculty member had a low outlier salary for which there was no explanation. The department made a salary adjustment of $\$ 29,700$ retroactive to 07/01/17.

## D. School of Pharmacy

There were two faculty identified in the residual analysis as $140 \%$ above the predicted salary values. Both were female faculty, full professor rank, and in the Adjunct series. There were no male comparators for these faculty members and the adjusted regression results by rank and department revealed that Adjunct faculty made less than Ladder rank.

## High Outlier Salaries ( $\mathrm{N}=2$ )

The two faculty members with high outlier salaries do not hold leadership positions.

## Low Outlier Salaries ( $\mathrm{N}=\mathrm{O}$ )

The School did not have any individuals with a low outlier salary.

## III. Charge 1 - Examine inequities in either URM status or gender

## A. Summary of school analysis results and actions

Each school conducted logistic regression analyses and provided individual data to departments for further analysis. The schools of Dentistry, Nursing and Pharmacy conducted matched-pair (individuallevel) analyses for $X+Y$ salaries, matching on series, rank and step when possible. The School of Medicine provided individual-level data to each department and requested further analysis for those departments found to have statistically significant salary imbalances by gender or URM status.

## Summary of Committee Review

| School | Action Plan/Report <br> Submission | Initial School Findings and Committee <br> Response | Final Committee <br> Response and <br> Recommendation |
| :--- | :--- | :--- | :--- |
| Dentistry | Original action plan: <br> December 12, 2017 <br> Final action plan: <br> May 18, 2018 | Initial School Findings: No statistically <br> significant evidence of salary imbalance. <br> A number of individual imbalances <br> between URM and non-URM faculty were <br> identified and needed further evaluation <br> through consultation with department <br> chairs. <br> Committee Response: Requested <br> explanation of match-pair analysis <br> findings that showed salary imbalance of <br> pairs. Requested residual outlier analysis <br> of high and low outlier salaries. <br> Subsequent School Findings: Imbalances <br> (Appendix B) <br> analyses and action plan; | Accepted supplemental <br> Subsities found. <br> were explained by non-discriminatory <br> factors and business practices. No salary <br> inequities reported. |


| Nursing | Original action plan: December 12, 2017 <br> Final action plan: June 12, 2018 | Initial School Findings: No statistically significant evidence of salary imbalance. <br> Committee Response: Requested residual outlier analysis of high and low outlier salary. <br> Subsequent School Findings: Based on the low outlier salary analysis (matchedpair), one faculty member was identified as warranting a salary adjustment which was made retroactive (effective 07/01/17) in the amount of $\$ 29,700$. This brings this faculty member's salary in line with peers with the same rank, step, and series. | Accepted supplemental analyses, action plan, and correction of one identified salary inequity $(\$ 29,700)$. (Appendix D) |
| :---: | :---: | :---: | :---: |
| Medicine | Original action plan: <br> December 12, 2017 <br> Final action plan: <br> June 20, 2018 | Initial School Findings: Imbalances favoring male faculty were found based on Assistant (4\%) and Associate (8\%) rank as well as with faculty with Z payments ( $26-35 \%$ based on rank). No evidence of salary inequities. <br> Committee Response: Requested residual outlier analysis of low and high outlier salary. <br> Subsequent School Findings: As part of the low outlier analysis, one department identified two female faculty members whose salaries were low and for which there was no explanation. The department made retroactive increases to their salaries (effective 07/01/17), a total of $\$ 84,300$ in salary adjustments. | Accepted supplemental analyses, action plan, and correction of two identified salary inequities ( $\$ 59,200$ and $\$ 25,100$ ). (Appendix C) |
| Pharmacy | Original action plan: <br> December 12, 2017 <br> Original action plan determined final | Initial School Findings: No statistically significant evidence of salary inequities. <br> Committee Response: Requested residual outlier analysis of low and high outlier salary. <br> Subsequent School Findings: No salary inequities reported. | Accepted supplemental analyses and action plan; no inequities found. (Appendix E) |

## IV. Charge 2 - Evaluate methodology

The School of Medicine provided feedback regarding the current methodology of salary data capture and analysis. The Committee considered this feedback and responses are documented in Appendix G.

Per the UCSF Office of Diversity and Outreach, the working definition of an underrepresented minority (URM) has been refined to include Vietnamese and Hmong. In future analyses, faculty who self-identify as Vietnamese will be included among the URM faculty. At present, UC employment forms do not provide an option for faculty to self-identify as Hmong.

The Committee supported the continued generation of residual salary data and subsequent school-level analyses. The Recommendations section of this report includes further refinements to analytic methodology that will improve consistency in salary equity review across the campus.

## V. Recommendations

As the initial campus-level analysis and the high outlier analyses have shown, gender-based imbalances remain. The results suggest these imbalances may be related to:

- The lower proportion of women among the high outliers. Fewer women than men were identified as having a leadership role (as defined by their departments) that contributed to their salary.
- The higher proportion of women (than men) in lower paying sub-specialties.

The Committee makes the following recommendations:

1. School/department analysis
a. The Committee will continue to conduct an overall campus-level analysis that will generate residuals. When high and low outlier salaries are identified by the campus level analysis, the schools/departments will be expected to provide the following:
i. Low outliers: Matched pair analysis
ii. High outliers:
2. Salary justification for faculty whose salary is set at the school or department level and who have leadership roles that contribute to their $X+Y$ salary, and a description of the leadership role. In addition, report if the faculty member was appointed to the leadership role following a search process.
a. Search process information will be requested for leadership appointments effective 07/01/18 or later.
3. Salary determination method and/or context for faculty whose salary is set outside the school or department. If the faculty member serves in a leadership role outside the school or department, report if the faculty member was appointed to the leadership role following a search process.
4. Matched pair analysis for all other/remaining faculty identified as high outliers.
b. Units (departments or divisions) of 50 or more faculty, will be expected to conduct a statistical analysis for overall salary imbalance in $X+Y$ and $Z$ compensation by gender and by URM status. When imbalances are identified, the unit should provide additional data and/or analyses to assess whether the imbalances represent inequities. Units (departments or divisions) of less than 50 faculty are encouraged, but not required, to conduct additional statistical analysis as appropriate.
5. Each School is required to develop guidelines for payment of stipends for administrative roles. Such guidelines should be consistent with the Academic Personnel and Programs policy regarding

Administrative stipends for academic appointees (APM 633-80b ${ }^{3}$ ). Effective July 1, 2019, schools will pay new administrative stipends as $Z$ payments and not as part of the annual negotiated salary amount (Y), per policy (APM 670).
3. Since this was the first year that Schools were provided with residual salary data and asked to provide additional information on high outlier salaries, the data and analyses provided varied by School. This helped inform the Committee on strategies to improve the analysis in future years. For future FSER reports, the following recommendations are made for the high outlier analysis:
a. When a department/school attributes a high outlier salary to a "leadership role" any subsequent appointments to those positions or similar positions should ensure transparency and equal opportunity for all interested faculty to be considered. This can be achieved by a national search, a broadly communicated internal UCSF search, or some other process that is well-documented.

At a minimum this process should be adopted for positions at the Department Chair, Division Chief/Chair, Dean, and faculty administrators and appointees in CxO positions in the Health System.
4. Action Plans: Where the Schools provide specific actions they plan to take for the following year, the FSER Committee will expect the School to report on progress made when the next action plan report is produced. These actions will be documented in future FSER reports.

[^2]
## Appendix A. Committee Membership

The Faculty Salary Equity Review (FSER) Committee consisted of the following members:

| Name | Title |
| :--- | :--- |
| Brian Alldredge, PharmD, Chair | Vice Provost Academic Affairs |
| DorAnne Donesky, PhD, ANP-BC | Academic Senate Committee of Faculty Welfare |
| Elena Fuentes-Afflick, MD, MPH | Vice Dean for Academic Affairs, School of Medicine |
| David Glidden, PhD | Academic Senate's Committee on Academic Personnel |
| Wilson Hardcastle, MLIS | Academic Data Coordinator, VPAA Office |
| Joan Hilton, ScD, MPH | Academic Senate's EQOP Committee |
| Thomas Kearney, PharmD | Associate Dean for Academic Affairs, School of Pharmacy |
| Cathy Lomen-Hoerth, MD, PhD | Professor of Clinical Neurology |
| Cynthia Lynch Leathers, MBA | Assistant Vice Provost for Academic Affairs |
| Chuck McCulloch, PhD | Professor, Epidemiology \& Biostatistics |
| Renee Navarro, MD, PharmD | Vice Chancellor for Diversity and Outreach |
| George Taylor, DMD, MPH, DrPH | Associate Dean for Diversity and Inclusion, School of Dentistry |
| Catherine Waters, RN, PhD, FAAN | Interim Associate Dean for Academic Affairs, School of Nursing |
| Kevin Weil | Project Manager, VPAA Office |

## 2018 UCSF SCHOOL OF DENTISTRY FACULTY SALARY EQUITY REPORT: Data for 20162017

## SUMMARY

Purpose: To examine the potential inequities in faculty salaries and accelerated academic advancements for by underrepresented minority status (URM) and gender within the School of Dentistry. Data for this analysis were from the time period of: July 1, 2016 to June 30, 2017.

## Major Findings:

## X+Y Salary at the School Level:

Gender: Unadjusted and adjusted analyses did not find significant differences in $\mathrm{X}+\mathrm{Y}$ salary by gender.

URM status: Unadjusted and adjusted analyses did not find significant difference in $\mathrm{X}+\mathrm{Y}$ salary by URM status.

## X+Y Salary at the Department Level:

Differences in $X+Y$ salaries had reasonable explanations for all departments. Some faculty identified and being lower paid than model-predicted values received $Z$ payments that, if considered, would have prevented them from being in the lower paid group. Differences in scale among faculty accounted for some differences in $X+Y$ between matched faculty in some departments.

## $Z$ Payments at the School Level

Gender: Unadjusted odds ratio for female faculty having a Z payment was 0.4318 compared to male faculty, $95 \% \mathrm{Cl}(0.1035,1.8010)$. While the differences are not statistically significant, the sample sizes are small for receiving $Z$ payments and there is a tendency for female faculty to receive smaller $Z$ payments and less chance to receive any $Z$ payment than male faculty in the unadjusted analyses.

URM status: unadjusted analyses did not find significant differences in the amount of $Z$ payments and odds of having a $Z$ payment by URM status.

## $\underline{Z}$ Payments at the Department Level

The major finding regarding $Z$ payments was the inconsistent way in which $Z$ payments are used for compensation.

## Advancements at the School Level

Gender: Both unadjusted and adjusted analyses did not find statistically significant difference in merits and/or promotions ( 0,1 , and 2 times) received between 2014 and 2017 by gender.

URM status: Unadjusted analyses did not find statistically significant difference in merits and/or promotions ( 0,1 , and 2 times) received between 2014 and 2017 by URM status. While the differences are not statistically significant, the sample size is relatively small for URM faculty receiving merits/promotions and there is a tendency for URM faculty to receive fewer merits/promotions than non-URM faculty in the unadjusted analyses.

## Accelerated Advancement at the School Level

Gender: The unadjusted analyses did not find a statistically significant difference in having an accelerated advancement between 2014 and 2017 by gender.

URM status: The unadjusted analysis with Fisher's exact test did not find a statistically significant difference in having an accelerated advancement between 2014 and 2017 by URM status.

## Advancements at the Department Level

Most differences in advancement were readily explained.

## URM and non-URM Matched Pair Results:

Differences between URM and non-URM faculty were identified and yet these differences were readily explained.

## ACTION PLANS

1. Determine method for determining $Y$ and $Z$ payments for each department
2. Consider expecting all departments to use the same method for determining $Y$ and $Z$ payments
3. Conduct additional discussion with department chairs to obtain further explanation of differences in advancement for certain faculty matched pairs
4. Include scale in future data sets to assist in determining reasons for differences in $X+Y$


#### Abstract

ANALYSES Analysis Plan: The analysis of the School of Dentistry (SOD) data followed the analysis plan of the overall UCSF 2017 Faculty Salary Equity Review (FSER) process. The data specific to the SOD was provided by Office of Academic Affairs, UCSF Human Resources, including 2017 X+Y salary and Z payment, and advancements between 2014 and 2017.

The outcomes of interest included: 1) $X+Y$ salary was first adjusted to the amount at full time by dividing by the percent effort of the appointment and was then log transformed to a symmetric distribution; 2) Since only a few faculty members received a $Z$ payment, $Z$ payment was evaluated in two ways: log transformed $Z$ payment and whether or not a faculty member received any Z payment; 3) Advancement was recoded as 0,1 or 2 merits and/or promotions a faculty member received between 2014 and 2017; 4) Accelerated advancement was evaluated as whether or not a faculty member received any accelerated advancement between 2014 and 2017.


The comparison variables included:

1) Gender: coded as female or male;
2) Underrepresented minority (URM) vs. non-URM: where URM was defined as those who identified as Black or African American, Hispanic, Native American/Alaskan Native, Filipino, or Hawaiian/Pacific Islander, and non-URM was defined as those who identified as White, Asian, or declined to state.

Covariates were included in regression models were:

1) Series: Ladder rank, In Residence, Clinical X, HS Clinical, or Adjunct;
2) Rank: Professor, Associate, or Assistant;
3) Step: 1-7;
4) Doctorate type: Clinical, Research, Combination or Other degree; and
5) Department: Cell \& Tissue Biology (CTB), Oral \& Maxillofacial Surgery (OMS), Orofacial Sciences (OFS), and Preventive \& Restorative Dental Sciences (PRDS).

## Primary Methods of Analysis at the School Level:

X+Y salary (log transformed) was analyzed using linear regression models to compare salaries between females and males and between URM and non-URM faculty, where the five covariates were included as fixed effects to explore potential differences by series, rank, step, degree type, and department.

Z payments were compared by gender and URM status in two models: a linear model on the amount of the $Z$ payment (log transformed), and a logistic regression model on whether or not a faculty member received a $Z$ payment. The five covariates were included as fixed effects in both models. When there were few subjects with a response, no covariates were included in the model.

Advancements were compared by gender and URM status in two models: a cumulative logit model on merits and/or promotions ( 0,1 , and 2 merits and/or promotions) received between 2015 and 2017, and a logistic regression model on whether or not a faculty member had any accelerated advancements. The five covariates were included as fixed effects in both models. When there are few subjects with a response, no covariates were included in the model.

Secondary Analyses at the School Level:
URM and non-URM Matched Pairs: Because of the small number of URM faculty in the SOD, matched pair analyses were conducted for the 7 URM faculty members in SOD to examine possible imbalances between matched URM and non-URM pairs. The URM and non-URM pairs were matched on series, rank, step, degree type and department. When there was no match found, pairs were matched on series, rank and step only.

Identification of low and high paid faculty: The expected amount of $X+Y$ salary was computed based on the model with series, rank, step, degree type, series, gender, URM status and department and compared to the actual $\mathrm{X}+\mathrm{Y}$ salary a faculty member was paid. Following the campus wide rule, a faculty member was identified as low paid if the actual $X+Y$ salary is less than $75 \%$ of the expected $X+Y$ salary based on models, and as high paid if the actual $X+Y$ salary is more than $140 \%$ of the expected $X+Y$ salary based on models. Additional matched pair analysis was performed for faculty members with $X+Y$ payment below $75 \%$ or 1.4 standard deviations below the model predicted salary identified by campus-wide analysis, matched to faculty members whose salaries were neither substantially higher nor lower that their predicted salaries. The matching in those analyses was primarily based on rank, step and department.

## Results at the School Level

Descriptive Statistics Table 1 shows characteristics of faculty members at SOD. The SOD had 82 faculty members who were greater than or equal to $75 \%$ time, following the definition used within the broader campus analysis. Thirty six (43.90\%) were female and 46 (56.10\%) were male. Seven ( $8.54 \%$ ) were URM and 75 (91.46\%) were Non-URM.

Table 1: Characteristics of faculty members at SOD


| Accelerate <br> Advancement | $3(8.33 \%)$ | $5(10.87 \%)$ | $0(0.00 \%)$ | $8(10.67 \%)$ | $8(9.76 \%)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

## X+Y Salary

Both the unadjusted and adjusted analyses did not find significant differences in $X+Y$ salary by gender (Table 2). The unadjusted female/male ratio of $X+Y$ salary was 0.8721 with $95 \% \mathrm{Cl}$ (0.7476, 1.0191). After adjustment for series, rank, step, degree type and department, the female/male ratio of $X+Y$ salary was 0.9841 , meaning that females made $98.41 \%$ that of males ( $1.59 \%$ less). However, the difference was not statistically significant ( $p=0.7519$ ) with $95 \% \mathrm{Cl}$ (88.99\%, 108.84\%).

Table 2: Female/Male X+Y Salary Ratio

|  | Female/Male Ratio | $95 \% \mathrm{CI}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.8721 | $(0.7476,1.0191)$ | 0.0844 |
| Adjusted | 0.9841 | $(0.8899,1.0884)$ | 0.7519 |

Both the unadjusted and adjusted analyses did not find significant difference in $X+Y$ salary by URM status (Table 3). The unadjusted URM/non-URM ratio of $X+Y$ salary was 0.9494 with $95 \%$ $\mathrm{CI}(0.7175,1.2562)$. After adjustment for series, rank, step, degree type and department, the URM/Non-URM ratio of $X+Y$ salary was 1.0033, meaning that URM made $100.33 \%$ that of nonURM ( $0.33 \%$ more). However, the difference was not statistically significant ( $p=0.9718$ ) with 95\% CI (83.49\%, 120.57\%).

Table 3: URM/Non-URM X+Y Salary Ratio

|  | URM/non-URM Ratio | $95 \% \mathrm{CI}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.9494 | $(0.7175,1.2562)$ | 0.7131 |
| Adjusted | 1.0033 | $(0.8349,1.2057)$ | 0.9718 |

There were statistically significant differences in $X+Y$ salary by series, rank, step and department after full adjustment (Table 4 and Tables A1-A3). Specifically, adjunct faculty made $76.01 \%$ that of ladder rank faculty ( $23.99 \%$ less), and the difference was statistically significant ( $p=0.0094$ ) with $95 \% \mathrm{Cl}(61.96 \%, 93.25 \%)$. Assistant professors made statistically significant less $X+Y$ salary than associate professor ( $p=0.0024$ ) and full professor ( $p<0.0001$ ), and associate professor made statistically significant less $X+Y$ salary than full professor ( $p=0.0044$ ). PRDS faculty made statistically significant less $X+Y$ salary than OMFS faculty ( $p<0.0001$ ) and OFS faculty ( $p<0.0001$ ), CTB faculty made statistically significant less $X+Y$ salary than OMFS faculty ( $p<0.0001$ ), and OFS faculty made statistically significant less $X+Y$ salary than OMFS faculty ( $p=0.0002$ ).

Table 4: Significant $X+Y$ Salary Ratios by Series, Rank and Department

|  | Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Series <br> Adjunct/Ladder Rank | 0.7601 | $(0.6196,0.9325)$ | 0.0094 |
| Rank | 0.7621 | $(0.6420,0.9045)$ |  |
| Assistant/Associate | 0.6085 | $(0.5258,0.7042)$ | $<0.0024$ |
| Assistant/Full | 0.7985 | $(0.6860,0.9295)$ | 0.0044 |
| Associate/Full |  |  |  |
| Department |  |  |  |


| PRDS/OMFS | 0.4888 | $(0.4009,0.5958)$ | $<0.0001$ |
| :--- | :---: | :---: | :---: |
| PRDS/OFS | 0.7316 | $(0.6348,0.8433)$ | $<0.0001$ |
| CTB/OMFS | 0.5544 | $(0.4357,0.7055)$ | $<0.0001$ |
| OFS/OMFS | 0.6680 | $(0.5461,0.8172)$ | 0.0002 |

## Z Payment

Eight of the 46 male faculty members (17.39\%) and three of the 36 female faculty members ( $8.33 \%$ ) received a $Z$ payment (Table 6a). Because only a few faculty members received a Z payment, adjusted analyses on five covariates were not reliable. The unadjusted analyses did not find significant difference in the amount of $Z$ payment and having a $Z$ payment by gender (Table 5). The unadjusted female/male ratio of $Z$ payment was 0.4206 , meaning that females made $87.21 \%$ of males' $Z$ payments (i.e. $57.9 \%$ less). However, the difference was not statistically significant $(\mathrm{p}=0.2454)$ with $95 \% \mathrm{Cl}(0.0682,2.5956)$. The unadjusted odds ratio for female faculty having a Z payment was 0.4318 compared to male faculty, $95 \% \mathrm{Cl}(0.1035$, 1.8010).

Table 5: Female/Male Z Payment Ratio and Odds Ratio for Any Z Payment

|  | Amount of Z Payment |  |  | Having any Z Payment |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female/Male <br> Ratio | $95 \% \mathrm{Cl}$ | P value | Odds <br> Ratio | $95 \% \mathrm{Cl}$ |  | P value | Unadjusted | 0.4206 | $(0.0682,2.5956)$ |
| :--- | :--- | :--- |

One of the 7 URM faculty members (14.29\%) and ten out of the 75 non-URM faculty members (13.33\%) received a Z payment (Table 6a). Because only a few faculty members received a $Z$ payment, adjusted analyses on five covariates modeling URM status for $Z$ payments were not reliable. The unadjusted analyses did not find a significant difference in the amount of $Z$ payment or the odds having any $Z$ payment by URM status (Table 6). The unadjusted URM/non-URM ratio of $Z$ payment was 0.9561 , meaning that URM faculty made $95.61 \%$ of nonURM (4.39\% less) Z payments. However, the difference was not statistically significant ( $p=0.9737$ ) with $95 \% \mathrm{Cl}(0.0478,19.1079)$. The unadjusted odds ratio for URM faculty having a Z payment was 1.0833 compared to non-URM faculty, $95 \% \mathrm{Cl}(0.1138,10.3124)$.

Table 6: URM/non-URM Z Payment Ratio and Odds Ratio for Any Z Payment

|  | Amount of Z Payment |  |  | Having any Z Payment |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | URM/non-URM <br> Ratio | $95 \% \mathrm{Cl}$ | P <br> value | Odds <br> Ratio | $95 \% \mathrm{CI}$ | P value |
|  | 0.9561 | $(0.0478,19.1079)$ | 0.9737 | 1.0833 | $(0.1138,10.3124)$ | 0.9438 |

There were no significant difference in $Z$ payment by series, rank, step, and department.

Table 6a: SOD Z Payments Summary Listing, Highest to Lowest

| URM | Gender | Series | Rank | Step | Department | Z |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non URM | M | HS Clinical | Associate | 3 | PRDS | 115,603 |
| Non URM | M | Ladder | Full | 7 | PRDS | 85,546 |
| Non URM | F | HS Clinical | Associate | 1 | PRDS | 55,156 |
| Non URM | M | HS Clinical | Assistant | 4 | OMFS | 38,732 |
| Non URM | M | Clinical X | Associate | 3 | PRDS | 25,078 |
| URM | M | HS Clinical | Assistant | 3 | OMFS | 18,195 |
| Non URM | M | HS Clinical | Full | 2 | OMFS | 10,500 |
| Non URM | M | Ladder | Associate | 2 | CTB | 10,000 |
| Non URM | F | HS Clinical | Full | 5 | PRDS | 7,522 |
| Non URM | M | HS Clinical | Assistant | 3 | OMFS | 6,000 |
| Non URM | F | HS Clinical | Associate | 3 | PRDS | 2,480 |

## Advancement

Eleven of the 36 female faculty members (30.56\%) and 22 of the 46 male faculty members ( $47.83 \%$ ) had one merit/promotion, and 13 females ( $36.11 \%$ ) and 13 males ( $28.26 \%$ ) had two merits/promotions between 2014 and 2017. Both unadjusted and adjusted analyses did not find statistically significant difference in merits and/or promotions ( 0,1 , and 2 times) received between 2014 and 2017 by gender (Table 7). Females had 0.9731 unadjusted odds ratio and 0.9069 adjusted odds ratio of having one more merit/promotion compared to males. However, the gender difference was not statistically significant ( $p=0.9478$ unadjusted, 0.8380 adjusted).

Table 7: Female vs. Male Odds Ratio for Advancement

|  | Odds Ratio | $95 \% \mathrm{CI}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.9731 | $(0.4264,2.2210)$ | 0.9478 |
| Adjusted | 0.9069 | $(0.3504,2.3475)$ | 0.8380 |

Three out of the 7 URM faculty members (42.86\%) and 30 out of the 75 non-URM faculty members (40.00\%) had one merit/promotion, and 1 URM faculty (14.29\%) and 25 non-URM faculty members (33.33\%) had two merits/promotions between 2014 and 2017. Because of the small number of URM faculty having one or two merits/promotions, only unadjusted analyses were considered. The unadjusted analyses did not find statistically significant difference in merits and/or promotions (0, 1, and 2 times) received between 2014 and 2017 by URM (Table 8). URM faculty members had 0.4355 unadjusted odds ratio of having one more merit/promotion compared to non-URM. However, the difference by URM status was not statistically significant ( $p=0.2589$ unadjusted). While the differences are not statistically significant, the sample size is relatively small for URM faculty receiving merits/promotions and the odds ratio that is substantially less than one suggests a possible tendency for URM faculty to receive fewer merits/promotions than non-URM faculty in the unadjusted analyses.

Table 8: URM vs. non-URM Odds Ratio for Advancement

|  | Odds Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.4355 | $(0.1017,1.8658)$ | 0.2589 |

There was a significant difference in advancement by department ( $p=0.0245$ ). Three out of 14 CTB faculty members (21.43\%), 2 out of 9 OMFS faculty members ( $22.22 \%$ ), 10 out of 25 OFS faculty members ( $40 \%$ ), and 8 out of 34 PRDS faculty members ( $23.53 \%$ ) did not have any merit or promotion. Five out of 14 CBT faculty members (35.71\%), 5 out of 9 OMFS faculty members (55.56\%), 13 out of 25 OFS faculty members (52\%), and 10 out of 34 PRDS faculty members ( $29.41 \%$ ) had one merit or promotion. Six out of 14 CBT faculty members ( $42.86 \%$ ), 2 out of 9 OMFS faculty members (22.22\%), 2 out of 25 OFS faculty members (8\%), and 16 out of 34 PRDS faculty members (47.06\%) had two merits and/or promotion between 2014 and 2017 (Table A4). After adjustment on series, rank, step, gender and URM status, OFS had 0.0987 odds ratio of having one more merit/promotion between 2014 and 2017 compared to PRDS with $95 \% \mathrm{Cl}(0.0149,0.6554)$; and 0.1425 odds ratio compared to OMFS with $95 \% \mathrm{Cl}$ ( 0.0372 , $0.5463)$ (Table 9).

Table 9: OFS vs. PRDS and OMFS Adjusted Odds Ratio for Advancement

|  | Odds Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| OFS vs. PRDS | 0.0987 | $(0.0149,0.6554)$ | 0.0173 |
| OFS vs. OMFS | 0.1425 | $(0.0372,0.5463)$ | 0.0052 |

Accelerated Advancement
Three out of the 36 female faculty members (8.33\%) and 5 out of the 46 male faculty members (10.87\%) had one accelerated advancement between 2014 and 2017. Because of the small number of faculty having an accelerated advancement, only unadjusted analyses were considered. The unadjusted analyses did not find statistically significant difference in having an accelerated advancement between 2014 and 2017 by gender (Table 10). Females had 0.7455 unadjusted odds ratio of having an accelerated advancement compared to males. However, the gender difference was not statistically significant ( $p=0.7027$ ).

Table 10: Accelerated Advancement by Gender between 2014 and 2017

|  | Female | Male | Odds Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Accelerated <br> advancement | $3(8.33 \%)$ | $5(10.87 \%)$ | 0.7455 | $(0.1621,3.4290)$ | 0.7027 |

None of the 7 URM faculty members ( $0.00 \%$ ) and 8 out of the 75 non-URM faculty members (10.67\%) had one accelerated advancement between 2014 and 2017. The unadjusted analysis with Fisher's exact test did not find statistically significant difference in having an accelerated advancement between 2014 and 2017 by URM status (Table 11, p=1.0000).

Table 11: Accelerated Advancement by URM status between 2014 and 2017

|  | URM | Non-URM | P value |
| :--- | :---: | :---: | :---: |
| Accelerated <br> advancement | $0(0.00 \%)$ | $8(10.67 \%)$ | 1.0000 |

## URM and non-URM Matched Pair Results (Table 12):

Tables 12 shows the $X+Y$ salary, $Z$ payment, number of merits/promotions and number of accelerated advancement for each URM and non-URM matched pair. Five URM faculty made less $\mathrm{X}+\mathrm{Y}$ than their matched non-URM faculty, including two adjunct assistant professors step 1, one Clinical X full professor step 2, two ladder rank full professor step 5. Two URM faculty (one HS clinical assistant professor step 3, and one HS clinical full professor step 6) made more $X+Y$ than their matched non-URM faculty. One URM faculty (HS clinical assistant professor step 3) also made more $Z$ payment than his matched non-URM faculty, and one URM faculty (Clinical X full professor step 2) had one less merit/promotion than his matched non-URM faculty.

Pair 1: The URM faculty earned $\$ 11,000$ less $X+Y$ than the matched non-URM faculty. Reason for the difference: the non-URM faculty member has a higher salary scale (scale 3 vs scale 2 ) due to appointment in a different department (OFS vs PRDS) and the non-URM faculty member has a $Y$ component to their salary while the URM faculty member does not.

Pair 2: The URM faculty earned $\$ 11,000$ less $X+Y$ than the matched non-URM faculty. Reason for the difference: the non-URM faculty member has a higher salary scale (scale 3 vs scale 2 ) due to appointment in a different department (OFS vs PRDS) and the non-URM faculty member has a Y component to their salary while the URM faculty member does not.

Pair 3: The URM faculty earned $\$ 28,603$ less $X+Y$ and had one less merit/promotion than the matched non-URM faculty.

Reason for the difference: different degree type. The non-URM faculty member has a higher $Y$ salary component $(\$ 45,303)$ than the URM faculty member $(\$ 16,700)$ due to the difference in clinical revenue related to type of specialty practice (oral medicine for URM faculty member vs orthodontics for non-URM faculty member).

Pair 4: The URM faculty earned $\$ 61,667$ more $X+Y$ than the average $X+Y$ of the 3 matched non-URM faculty members and $\$ 16,195$ more $Z$ payment than than the average of the 3 matched non-URM faculty.

Reason for the differences: The differences in the larger $X+Y$ for the URM faculty member are due to a $Y$ with a $\$ 20,000$ recruitment incentive when compared to the 2 other oral and maxillofacial surgeons whose salaries were $\$ 225,000$ and $\$ 250,000$ respectively. The reason the female oral and maxillofacial surgeon's was $\$ 225,000$ is due a lower Y associated with simultaneous enrollment in a PhD program (a mutual agreement between the department chair and the faculty member). The difference in Y for the female faculty earning an $\mathrm{X}+\mathrm{Y}$ of $\$ 150,000$ is due to that faculty member being a general dentist and not having an MD degree. The reason for the higher $Z$ for the URM faculty member is due to higher clinical revenue generation.

Pair 5: The URM faculty earned $\$ 120,750$ more $X+Y$ than the matched non-URM faculty. Reason for the difference: The difference is due to the URM faculty member having a $Y$ salary component due to an associate dean's level administrative position and revenue from patient care. The non-URM faculty member does not
have a Y salary component. Additionally, the URM faculty member's scale=2 while the non-URM faculty member's scale=1.

Pair 6: The URM faculty earned $\$ 6,400$ less $X+Y$ than the matched non-URM faculty. Reason for the difference: the non-URM faculty member has a Y component to his salary $(\$ 6,400)$ from research funding while the URM faculty member does not have research or patient care funding to support a Y component to his salary. Reason for the difference in advancement: The URM faculty member has been on faculty at UCSF for 6+ years and the appointment timing allowed for 2 advancements, while the non-URM faculty member elected to submit for the next advancement in 2017.

Pair 7: The URM faculty earned $\$ 28,000$ less $X+Y$ than the matched non-URM faculty. Reason for the difference: The non-URM faculty member has a higher $Y$ component due to a higher amount of research revenue generation over a longer period of time. The higher scale for the URM faculty member (scale=3) vs the non-URM faculty member (scale=2) from being in a different department somewhat offsets the difference in $\mathrm{X}+\mathrm{Y}$.

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Table 12: SOD URM and non-URM Matched Pairs

| Pair | URM Status | Gender | Series | Rank | Step | Degree | Dept | X | Y | X+Y | Z | \# Adv | \# Accl | $\begin{aligned} & \text { Difference } \\ & \text { in } X+Y \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | URM | F | Adjunct | Assist | 1 | Clinical | PRDS | 84,000 | 0 | 84,000 | 0 | 0 | 0 |  |
|  | Non URM | M | Adjunct | Assist | 1 | Combin | OFS | 91,000 | 4,000 | 95,000 | 0 | 0 | 0 | -11,000 |
| 2 | URM | M | Adjunct | Assist | 1 | Research | PRDS | 84,000 | 0 | 84,000 | 0 | 0 | 0 |  |
|  | Non URM | M | Adjunct | Assist | 1 | Combin | OFS | 91,000 | 4,000 | 95,000 | 0 | 0 | 0 | -11,000 |
| 3 | URM | M | ClinX | Full | 2 | Clinical | OFS | 143,300 | 16,700 | 160,000 | 0 | 1 | 0 |  |
|  | Non URM | M | Clin X | Full | 2 | Combin | OFS | 143,300 | 45,303 | 188,603 | 0 | 2 | 0 | -28,603 |
| 4 | URM | M | HS Clin | Assist | 3 | Clinical | OMFS | 129,200 | 140,800 | 270,000 | 18,195 | 1 | 0 |  |
|  | Non URM | F | HS Clin | Assist | 3 | Clinical | OMFS | 129,200 | 20,800 | 150,000 | 0 | 1 | 0 | 120,000 |
|  | Non URM | F | HS Clin | Assist | 3 | Clinical | OMFS | 129,200 | 95,800 | 225,000 | 0 | 1 | 0 | 45,000 |
|  | Non URM | M | HS Clin | Assist | 3 | Clinical | OMFS | 129,200 | 120,800 | 250,000 | 6,000 | 1 | 0 | 20,000 |
| 5 | URM | M | HS Clin | Full | 6 | Clinical | PRDS | 176,900 | 106,050 | 282,950 | 0 | 1 | 0 | 120,750 |
|  | Non URM | M | HS Clinl | Full | 6 | Clinical | PRDS | 162,200 | 0 | 162,200 | 0 | 2 | 0 |  |
| 6 | URM | M | Ladder | Full | 5 | Combin | PRDS | 164,100 | 0 | 164,100 | 0 | 2 | 0 | -6,400 |
|  | Non URM | M | Ladder | Full | 5 | Combin | PRDS | 164,100 | 64,000 | 170,500 | 0 | 1 | 0 |  |
| 7 | URM | F | Ladder | Full | 5 | Research | OFS | 177,800 | 92,200 | 270,000 | 0 | 0 | 0 | -28,000 |
|  | Non URM | M | Ladder | Full | 5 | Research | PRDS | 164,100 | 133,900 | 298,000 | 0 | 2 | 2 |  |

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Identifying faculty with $\mathrm{X}+\mathrm{Y}$ salaries more than 1.5 standard errors from predicted pay as estimated by the regression model

Previous years' Campus faculty salary equity reviews have requested identifying faculty members with $X+Y$ salaries that are more than 1.5 standard errors greater than or less than their predicted pay as estimated by the regression models used for these analyses. These faculty members are listed in Table 13. There were no further specific analyses performed using only the faculty listed in Table 13.

Table 13: Listing of faculty members with $X+Y$ salaries more than 1.5 standard errors from predicted pay as estimated by the regression model

| URM | Gender | Rank | Series | Step | Department | X+Y <br> Pay | Predicted <br> Pay | Standardized <br> Residuals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non <br> URM | M | Full | Ladder | 1 | CTB | 133,000 | 199,714 | -2.24 |
| Non <br> URM | M | Full | Ladder | 2 | OFS | 143,300 | 207,336 | -1.92 |
| Non <br> URM | F | Assistant | HS <br> Clinical | 3 | OMFS | 150,000 | 215,881 | -1.91 |
| Non <br> URM | M | Full | HS <br> Clinical | 6 | PRDS | 162,200 | 214,081 | -1.66 |
| Non <br> URM | F | Associate | In Res | 1 | PRDS | 165,000 | 130,422 | 1.54 |
| Non <br> URM | M | Full | Ladder | 3 | OFS | 342,130 | 254,657 | 1.55 |
| Non <br> URM | M | Full | Ladder | 1 | CTB | 245,300 | 185,219 | 1.63 |
| Non <br> URM | M | Full | Ladder | 5 | PRDS | 298,000 | 219,212 | 1.63 |
| URM | M | Full | HS <br> Clinical | 6 | PRDS | 282,950 | 214,081 | 1.67 |
| Non <br> URM | M | Full | Ladder | 7 | PRDS | 270,364 | 199,744 | 1.67 |
| Non <br> URM | F | Assistant | HS <br> Clinical | 2 | OFS | 160,000 | 117,415 | 1.67 |
| Non <br> URM | M | Assistant | HS <br> Clinical | 2 | OMFS | 250,000 | 178,597 | 1.77 |
| Non <br> URM | F | Full | Ladder | 4 | PRDS | 307,300 | 221,254 | 1.87 |
| Non <br> URM | M | Full | Ladder | 5 | OFS | 420,000 | 277,867 | 2.17 |

## High Salary Outliers and Low Salary Outliers

This year the FSER Committee initiated a focus for the Schools on two subsets of the FSER dataset population: faculty members with salaries above $140 \%$ of their model predicted salary (approximately $5.4 \%$ of the overall Campus data set population) were considered high salary outliers and those with salaries below 75\% of their model predicted salary (approximately 6.4\% of the overall data set population) were considered low salary outliers. The regression models were estimated using Campus-wide data analysis.

## High Salary Outliers

For faculty above $140 \%$ of the expected salary rate (the high salary outliers), each of the schools were requested to address the following questions:

1. Is the home department in control of setting this individual's salary?
a. If not, who sets the individual's salary? (name and/or role)
2. Does holding a "leadership position" contribute to this compensation?
a. If yes, what is the leadership role?
b. If yes, was this leadership position a searched position?

For the School of Dentistry there were 9 high outliers and 2 of the 9 faculty members' had their salary set outside of their home department. These salaries were set by the Dean. One is an associate dean and the other is a division chair and both are non-URM females.

Five of the nine faculty have leadership positions and four of these five positions were searched. Of the 2 male and 3 female high outliers with leadership positions, 3 non-URM and 1 URM faculty members' positions were searched.

## Low Salary Outliers

## Matched pair analysis for faculty members with X+Y payment below 75\% below the model-predicted salary (Table 14)

Matched pair analysis was done for faculty members with $\mathrm{X}+\mathrm{Y}$ payment below $75 \%$ below the model-predicted salary (the low salary outliers), identified by Campus-wide analysis, matched to faculty members whose salaries were neither substantially higher nor lower than their predicted salaries. The matching was primarily based on rank, step and department. There were some pairs with multiple faculty members matched to the faculty members below $75 \%$ of the modelpredicted salary. When there were no faculty found in the same department, a faculty member from a different department was selected.

## Oral and Maxillofacial Surgery (OMFS)

Pair 1: The faculty member below 75\% of the model-predicted salary is an HS Clinical Assistant Professor Step 2 in OMFS and matched with a faculty in the same department. That individual earned $\$ 115,000$ less than the matched faculty. The lower paid faculty member has a much lower Y component to their salary and that person is not an oral surgeon and MD like the higher
paid matched faculty member. A major reason for the large difference in $X+Y$ salaries is the market factor requiring higher salaries to recruit and hire oral and maxillofacial surgeons wellsuited for academic dentistry.

Pair 2: The faculty member below $75 \%$ of the model-predicted salary is an HS Clinical Assistant Professor Step 3 in OMFS and matched with three faculty members in the same department. That individual earned $\$ 120,000, \$ 75,000$ and $\$ 100,000$ less than the three matched faculty members respectively. There are several factors related to the differences in salaries. Two of the comparison faculty members get $Z$ payments as part of their salaries and each of the 3 comparator faculty members receive much higher Y salary components. Also, the lower paid faculty member is not an oral surgeon and MD like the higher paid matched faculty members. A major reason for the large differences in $X+Y$ salaries is the market factor requiring higher salaries to recruit and hire oral and maxillofacial surgeons well-suited for academic dentistry.

## Oral Facial Sciences (OFS)

Pair 3: The faculty member below $75 \%$ of the model-predicted salary is a Clinical X Full Professor Step 2 in OFS and matched with two faculty members in the same department. The lower paid faculty member earned $\$ 28,603$ and $\$ 60,000$ less than the two matched faculty members, respectively. The difference in salaries is due to differences in Y payments. The $Y$ payments are derived from clinical revenue for these faculty members. The lower paid faculty member specializes in oral medicine while the higher paid faculty members specialize in orthodontics, craniofacial anomalies, and pediatric dentistry, specialties and sub-specialties where the revenue generated from patient care is considerably higher than clinical care revenue generated in oral medicine.

Pair 4: The faculty member below $75 \%$ of the model-predicted salary is a Ladder rank Full Professor Step 2 in OFS and matched with one faculty member in the same department. The lower paid faculty member earned $\$ 45,700$ less than the matched faculty member. The difference in salary is due to several factors. The lower paid faculty did not generate revenue from research to have a Y component to his salary. The higher paid female faculty was recruited from another institution and had an extensive sponsored research portfolio upon arrival at UCSF. Her Y was generated from her research grants, and was negotiated, in part, as part of her recruitment package. The recruitment package came, in part, from the Chancellor's mid-career faculty recruitment program.

## Preventive and Restorative Dental Sciences (PRDS)

Pair 5: The faculty member below 75\% of the model-predicted salary is an HS Clinical Assistant Professor Step 3 in PRDS and matched with one faculty member in OFS. There was no faculty member in PRDS with similar series, rank and step. The lower paid faculty member in PRDS earned $\$ 56,000$ less than the matched faculty member in OFS. The difference in salary was due entirely to difference in scale (scale 2 vs scale 3 ) and a Y component for the OFS faculty member derived from patient care as a pediatric dentist whose revenue generation includes
delivering care as an attending in the operating room. The lower paid faculty member provides care in the UCSF ambulatory faculty practice but has not yet met the departmental requirements for reserve salary coverage in her comp plan before being eligible to have a Y component for her salary.

Pair 6: The faculty member below $75 \%$ of the model-predicted salary is an HS Clinical Assistant Professor Step 1 in PRDS and matched with two faculty members in the same department. The faculty member classified as lower paid actually earned the same amount as the matched faculty members. The classification for lower than predicted salary may be due to that individual having both a clinical degree and a PhD.

Pair 7: The faculty member below 75\% of the model-predicted salary is an HS Clinical Associate Professor Step 2 in PRDS and matched with one faculty member in OFS. The lower paid faculty earned $\$ 69,050$ less than the matched faculty member. The difference in salary is due to the higher scale for the OFS faculty member (scale1 vs 3 ) and the OFS faculty member's salary including a $Y$ component. The lower paid faculty member does not generate revenue from patient care or research. Many Associate Professors at step 2 in the SOD have $Y$ components due to research and/or clinical care activities.

Pair 8: The faculty member below 75\% of the model-predicted salary is an HS Clinical Associate Professor Step 2 in PRDS and matched with one faculty member in OFS. That individual's salary was $\$ 85,350$ less than the matched faculty member. The difference in salaries is due to a difference in scale (scale 2 vs 3 ) and a $Y$ salary component derived from patient care (including care in the operating room) by the faculty member in OFS who is a specialist in pediatric dentistry. The lower paid faculty member provides care in the UCSF ambulatory faculty practice and has not yet met the departmental requirements for salary reserve coverage in his comp plan before being eligible to have a Y component for his salary.

Pair 9: The faculty member below 75\% of the model-predicted salary is an HS Clinical Associate Professor Step 1 in PRDS and matched with one faculty member in the same department. The lower paid faculty earned $\$ 60,400$ less $X+Y$ salary than the matched faculty member. While the actual salary was lower than predicted for $X+Y$, that faculty member received a $Z$ payment for an amount that made the 2 salaries very equivalent. The $Z$ payment was for patient care revenue while the Y component of the comparator faculty member was derived from research grants and contracts and CTSI consultation funding.

Pair 10: The faculty member below $75 \%$ of the model-predicted salary is an HS Clinical Associate Professor Step 3 in PRDS and matched with two faculty members were in the same department. The lower paid faculty earned $\$ 12,200$ and $\$ 64,300$ less than the two matched faculty members, respectively. The differences are due to one comparator faculty member receiving both a $Y$ and a $Z$ component (for patient care [ Y ] and Dean's Office funding [Z]) and the other comparator faculty member receiving a $Y$ component derived from research funding. All of the other Associate Professors at step 3 in PRDS have $Y$ and/or $Z$ components in their salaries except the faculty member with the lower than predicted salary. The lower paid faculty member does not practice in the faculty practice and has no research funding contributing to a $Y$ component for her salary.

Pair 11: The faculty member below $75 \%$ of the model-predicted salary is an HS Clinical Associate Professor Step 3 in PRDS and matched with two faculty members in the same department. This faculty member's $X+Y$ salary was $\$ 19,800$ and $\$ 56,200$ less than the two matched faculty members, respectively. The model for determining the predicted salary does not include a $Z$ component in the total salary calculation. This faculty member has a Z component. When the $Z$ component is included in the total salary, the predicted salary is actually lower than the actual salary.

Pair 12: The faculty member below $75 \%$ of the model-predicted salary is a Ladder rank Full Professor Step 7 in PRDS and matched with two faculty members at the same rank and step in the same department. The lower paid faculty member earned $\$ 41,000$ and $\$ 111,364$ less in $X+Y$ salary than the two matched faculty members, respectively. This difference is explained by the lower paid faculty member's salary computed using scale=0, while the comparator faculty members' scales=2. The lower paid faculty salary's scale is actually scale=2, hence there is no difference in the X component of the salary. The lower paid faculty does not generate revenue from research funding or patient care and therefore has no Y component to his salary.

Continued on the next page

Table 14: Matched pairs for faculty $X+Y$ paid $<75 \%$ of the predicted payment identified by campus-wide analysis

| URM Status | Gender | Series | Rank | Step | Degree | Dept | X | Y | X+Y | Z | Difference in $\mathbf{X + Y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non URM | F | HS Clin | Assist | 2 |  | OMFS | 122,600 | 12,400 | 135,000 | 0 |  |
| Non URM | M | HS Clin | Assist | 2 |  | OMFS | 122,600 | 127,400 | 250,000 | 0 | -115,000 |
| Non URM | F | HS Clin | Assist | 3 |  | OMFS | 129,200 | 20,000 | 150,000 | 0 |  |
| URM | M | HS Clin | Assist | 3 |  | OMFS | 129,200 | 140,800 | 270,000 | 18,195 | -120,000 |
| Non URM | F | HS Clin | Assist | 3 |  | OMFS | 129,200 | 95,800 | 225,000 | 0 | -75,000 |
| Non URM | M | HS Clin | Assist | 3 |  | OMFS | 129,200 | 120,800 | 250,000 | 6,000 | -100,000 |
| URM | M | Clin X | Full | 2 |  | OFS | 143,300 | 16,700 | 160,000 | 0 |  |
| Non URM | F | Clin $X$ | Full | 2 |  | OFS | 143,300 | 45,303 | 188,603 | 0 | -28,603 |
| Non URM | M | Clin X | Full | 2 |  | OFS | 143,300 | 76,700 | 220,000 | 0 | -60,000 |
| Non URM | M | Ladder | Full | 2 |  | OFS | 143,300 | 0 | 143,300 | 0 |  |
| Non URM | F | Ladder | Full | 2 |  | OFS | 143,300 | 45,700 | 189,000 | 0 | -45,700 |
| Non URM | F | HS Clin | Assist | 3 |  | PRDS | 94,000 | 0 | 94,000 | 0 |  |
| Non URM | M | HS Clin | Assist | 3 |  | OFS | 101,800 | 48,200 | 150,000 | 0 | -56,000 |
| Non URM | M | HS Clin | Assist | 1 |  | PRDS | 84,000 | 0 | 84,000 | 0 |  |
| URM | F | Adjunct | Assist | 1 |  | PRDS | 84,000 | 0 | 84,000 | 0 | 0 |
| URM | M | Adjunct | Assist | 1 |  | PRDS | 84,000 | 0 | 84,000 | 0 | 0 |
| Non-URM | F | HS Clin | Assoc | 2 |  | PRDS | 100,900 | 0 | 100,900 | 0 |  |
| Non-URM | F | Clin X | Assoc | 2 |  | OFS | 119,300 | 50,650 | 169,950 | 0 | -69,050 |
| Non-URM | M | HS Clin | Assoc | 2 |  | PRDS | 110,100 | 0 | 110,100 | 0 |  |
| Non-URM | M | Clin X | Assoc | 2 |  | OFS | 119,300 | 76,150 | 195,450 | 0 | -85,350 |
| Non-URM | F | HS Clin | Assoc | 1 |  | PRDS | 104,600 | 0 | 104,600 | 55,156 |  |
| Non-URM | F | In Res | Assoc | 1 |  | PRDS | 104,600 | 60,400 | 165,000 | 0 | -60,400 |

Appendix B: SOD 2018 FSER Report and Action Plan

| Non-URM | F | HS Clin | Assoc | 3 | PRDS | 115,700 | 0 | 115,700 | 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-URM | F | HS Clin | Assoc | 3 | PRDS | 115,700 | 12,200 | 127,900 | 0 | -12,200 |
| Non-URM | F | Ladder | Assoc | 3 | PRDS | 115,700 | 64,300 | 180,000 | 0 | -64,300 |
| Non-URM | M | HS Clin | Assoc | 3 | PRDS | 115,700 | 5,100 | 120,800 | 115,603 |  |
| Non-URM | M | HS Clin | Assoc | 3 | PRDS | 115,700 | 14,900 | 130,600 | 0 | -19,800 |
| Non-URM | M | Clin X | Assoc | 3 | PRDS | 115,700 | 61,300 | 177,000 | 25,078 | -56,200 |
| Non-URM | M | Ladder | Full | 7 | PRDS | 159,000 | 0 | 159,000 | 0 |  |
| Non-URM | M | Ladder | Full | 7 | PRDS | 190,800 | 9,200 | 200,000 | 0 | -41,000 |
| Non-URM | M | Ladder | Full | 7 | PRDS | 190,800 | 79,564 | 270,364 | 85,546 | -111,364 |

## Department Level Analyses

## Cell and Tissue Biology (CTB)

CTB: There are 6 female and 8 male faculty in CTB, with no URM faculty. Except for one adjunct faculty member, all faculty are ladder rank. There was only one faculty who received $Z$ payment and one faculty who had an accelerated advancement. Females had slightly lower $X+Y$ payment than males but the difference was not significantly different. The advancement actions were not significantly different between females and males either.

Because of the small sample size, matched pair analyses were conducted, where 6 female faculty were matched with male faculty based on their series, rank, step and degree type. If no match was found for a female faculty member, a male faculty in a different step was matched.

Pair 1: The female assistant ladder rank professor in step 5 earned $\$ 39,060$ more $X+Y$ than the matched male assistant ladder rank professor in step 3. The female faculty had two advancements between 2014 and 2017 while the male faculty had no advancements. Both of them earned a research degree and are White.

Reason for the difference in $X+Y$ : the female faculty was in step 5 while the male faculty was in step 3, and the female faculty member had a higher Y component $(\$ 49,160$ vs $\$ 21,400$ ) due to a higher level of research funding.
Reason for the difference in advancement: The male faculty member started his appointment 6 months ago (in 2017) while the female faculty member's appointment has been for 5 years.

Pair 2: The female assistant ladder rank professor in step 5 earned $\$ 23,260$ more $X+Y$ than the matched male assistant ladder rank professor in step 3. The female faculty member had two advancements between 2014 and 2017 while the male faculty member had no advancements. They both earned a research degree and are White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the female faculty member was in step 5 while the male faculty member was in step 3, and the female faculty member had a higher $Y$ component for her salary ( $\$ 33,360$ vs $\$ 21,400$, respectively) due to generating more research grant funding.
Reason for the difference in advancement: The female faculty member has been appointed in the department for a longer period of time.

Pair 3: The female associate ladder rank professor in step 2 earned $\$ 3,466$ more $X+Y$ than the matched male associate ladder rank professor in step 2. They both had two advancements between 2014 and 2017. Both faculty earned a research degree. The female faculty is White and the male faculty is Asian.

Reason for the difference in $X+Y$ : the female faculty member had a higher $Y$ component for her salary ( $\$ 44,349$ vs $\$ 40,883$, respectively) due greater grant funding.

Pair 4: The female associate ladder rank professor in step 2 earned $\$ 24,240$ less $X+Y$ than the matched male associate ladder rank professor in step 2. The female faculty had no
advancement while the male faculty had two advancements. They both earned a research degree. The female faculty is White and the race of the male faculty is not stated.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the male faculty member had a Y component to his salary $(\$ 24,240)$ while the female faculty member did not have any $Y$ for her salary. This difference is due to the research grant funding generated to support a $Y$ by the male faculty member.
Reason for the difference in advancements: this difference is directly related to research and scholarly productivity as per the department chair.

Pair 5: The female full ladder rank professor in step 7 earned $\$ 48,000$ less $X+Y$ than the matched male full ladder rank professor in the Above the Scale (A/S) step. Both faculty had one advancement between 2014 and 2017. They both earned a research degree and are White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the female faculty is in step 7 while the male faculty is in A/S step.

Pair 6: The female full ladder rank professor in A/S step earned $\$ 12,700$ more $X+Y$ than the matched male full ladder rank professor in A/S step. Both faculty had one advancement between 2014 and 2017. They both earned a research degree and are White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : this difference is due to the female faculty member being further above scale than the male faculty member, as per the department chair.

Table 15: Characteristics of faculty at CTB

|  | Gender |  | URM Status |  | Overall |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | URM | Non-URM |  |
| Overall | 6 (42.86\%) | 8 (57.14\%) | 0 (0.00\%) | 14 (100.00\%) | 14 |
| Series <br> Ladder rank <br> In resident <br> Clinical X <br> HS clinical <br> Adjunct | $\begin{gathered} 6(100.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \text { (87.50\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 1(12.50 \%) \end{gathered}$ | $\begin{aligned} & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \\ & 0(0.00 \%) \end{aligned}$ | $\begin{gathered} 13 \text { (92.86\%) } \\ 0 \text { (0.00\%) } \\ 0 \text { (0.00\%) } \\ 0 \text { (0.00\%) } \\ 1 \text { (7.14\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 13 \text { (92.86\%) } \\ 0 \text { (0.00\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 1 \text { (7.14\%) } \\ \hline \end{gathered}$ |
| Rank Assistant Associate Full | $\begin{aligned} & 2 \text { (33.33\%) } \\ & 2 \text { (33.33\%) } \\ & 2 \text { (33.33\%) } \end{aligned}$ | $\begin{aligned} & 1 \text { (12.50\%) } \\ & 2(25.00 \%) \\ & 5(62.50 \%) \end{aligned}$ | $\begin{aligned} & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \\ & 0(0.00 \%) \end{aligned}$ | $\begin{aligned} & 3 \text { (21.43\%) } \\ & 4 \text { (28.57\%) } \\ & 7 \text { (50.00\%) } \end{aligned}$ | $\begin{aligned} & 3 \text { (21.43\%) } \\ & 4 \text { (28.57\%) } \\ & 7 \text { (50.00\%) } \end{aligned}$ |
| Step <br> 1 <br> 2 <br> 3 <br> 4 <br> 5 <br> 6 <br> 7 <br> 8 | $\begin{gathered} 0(0.00 \%) \\ 2(33.33 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 2(33.33 \%) \\ 0(0.00 \%) \\ 2(33.33 \%) \\ 0(0.00 \%) \end{gathered}$ | $\begin{gathered} 2(25.00 \%) \\ 2(25.00 \%) \\ 2(25.00 \%) \\ 0(0.00 \%) \\ 1(12.50 \%) \\ 0(0.00 \%) \\ 1(12.50 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \\ & 0(0.00 \%) \\ & 0(0.00 \%) \\ & 0(0.00 \%) \\ & 0(0.00 \%) \\ & 0(0.00 \%) \end{aligned}$ | $\begin{gathered} 2 \text { (14.29\%) } \\ 4 \text { (28.57\%) } \\ 2(14.29 \%) \\ 0 \text { (0.00\%) } \\ 3 \text { (21.43\%) } \\ 0 \text { (0.00\%) } \\ 3(21.43 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \text { (14.29\%) } \\ 4 \text { (28.57\%) } \\ 2(14.29 \%) \\ 0(0.00 \%) \\ 3 \text { (21.43\%) } \\ 0(0.00 \%) \\ 3(21.43 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ |
| Degree type Clinical Research Combination Other | $\begin{gathered} 0 \text { (0.00\%) } \\ 6 \text { (100.00\%) } \\ 0 \text { (0.00\%) } \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \text { (0.00\%) } \\ 6 \text { (75.00\%) } \\ 2 \text { (25.00\%) } \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \\ & 0 \text { (0.00\%) } \end{aligned}$ | $\begin{gathered} 0 \text { (0.00\%) } \\ 12 \text { ( } 85.71 \%) \\ 2 \text { (14.29\%) } \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \text { (0.00\%) } \\ 12 \text { (85.71\%) } \\ 2 \text { (14.29\%) } \\ 0(0.00 \%) \\ \hline \end{gathered}$ |
| $\mathrm{X}+\mathrm{Y}$ salary Mean $\pm$ SD Median | $\begin{gathered} 177,628 \pm 52,363 \\ 162,955 \end{gathered}$ | $\begin{gathered} 181,797 \pm 51,556 \\ 167,317 \end{gathered}$ | - - | $\begin{gathered} 180,010 \pm 49,904 \\ 162,955 \\ \hline \end{gathered}$ | $\begin{gathered} 180,010 \pm 49,904 \\ 162,955 \end{gathered}$ |


| Z payment |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Mean $\pm$ SD | $0 \pm 0$ | $1250 \pm 3536$ | - | 0 |  |
| Median | 0 | 0 | - | $14 \pm 2,673$ | $714 \pm 2,673$ |
| $>0$ | $0(0.00 \%)$ | $1(12.50 \%)$ | - | $3(21.43 \%)$ | 0 |
| Advancement | $1(7.14 \%)$ | $2(25.00 \%)$ | - | $5(35.71 \%)$ | $3(21.43 \%)$ |
| 0 | $2(14.29 \%)$ | $3(37.50 \%)$ | - | $6(42.86 \%)$ | $6(42.71 \%)$ |
| 1 | $3(21.43 \%)$ | $3(37.50 \%)$ | - |  | $1(7.14 \%)$ |
| 2 | $0(0.00 \%)$ | $1(12.50 \%)$ | - | $1(7.14 \%)$ |  |
| Accelerate |  |  |  |  |  |
| Advancement | $0(7.14 \%)$ |  |  |  |  |

Table 16: Unadjusted Female/Male $X+Y$ Salary Ratio and Advancement Odds Ratio at CTB

|  | Female/Male Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| $\mathrm{X}+\mathrm{Y}$ | 0.9780 | $(0.7028,1.3611)$ | 0.8859 |
| Advancement | 1.6667 | $(0.1774,15.6578)$ | 0.6256 |

Continued on next page

Table 17: CBT Matched Pair $X+Y$, Advancement and Accelerated Advancement

| Pair | URM <br> Status | Gender | Series | Rank | Step | Degree | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{X + Y}$ | $\mathbf{Z}$ | \# Adv | \# Accl | Difference in <br> $\mathbf{X + Y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Non URM | F | Ladder | Assist | 5 | Research | 113,100 | 49,160 | 162,260 | 0 | 2 | 0 |  |
|  | Non URM | M | Ladder | Assist | 3 | Research | 101,800 | 21,400 | 123,200 | 0 | 0 | 0 |  |
| $\mathbf{2}$ | Non URM | F | Ladder | Assist | 5 | Research | 113,100 | 33,360 | 150,000 | 0 | 2 | 0 | 29,060 |
|  | Non URM | M | Ladder | Assist | 3 | Research | 101,800 | 21,400 | 123,200 | 0 | 0 | 0 |  |
| $\mathbf{3}$ | Non URM | F | Ladder | Assoc | 2 | Research | 119,300 | 44,349 | 163,649 | 0 | 2 | 0 | 3,649 |
|  | Non URM | M | Ladder | Assoc | 2 | Research | 119,300 | 40,883 | 160,183 | 10,000 | 2 | 0 | 0 |
| $\mathbf{4}$ | Non URM | F | Ladder | Assoc | 2 | Research | 119,300 | 0 | 143,540 | 0 | 0 | 0 | 24,240 |
|  | Non URM | M | Ladder | Assoc | 2 | Research | 119,300 | 24,240 | 119,300 | 0 | 2 | 0 |  |
| $\mathbf{5}$ | Non URM | F | Ladder | Full | 7 | Research | 206,700 | 0 | 206,700 | 0 | 1 | 0 | $-48,000$ |
|  | Non URM | M | Ladder | Full | A/S | Research | 254,700 | 0 | 254,700 | 0 | 1 | 0 |  |
| $\mathbf{6}$ | Non URM | F | Ladder | Full | A/S | Research | 267,400 | 0 | 267,400 | 0 | 1 | 0 | 12,700 |
|  | Non URM | M | Ladder | Full | A/S | Research | 254,700 | 0 | 254,700 | 0 | 1 | 0 |  |

## Oral and Maxillofacial Surgery (OMFS)

OMFS: There are 3 female and 6 male faculty, and 1 URM and 8 non URM faculty in OMFS. Four male faculty ( 1 URM and 3 non URM) received $Z$ payment. One male non-URM faculty received one accelerated advancement. Except for one ladder rank faculty, all faculty are in the HS clinical rank. When compared in aggregate, females had significantly lower unadjusted $\mathrm{X}+\mathrm{Y}$ payment than males. Specifically females earned about 40\% less, on average, than males ( $p=0.0035$ ). However, among the three female faculty members, one is an oral and maxillofacial surgeon and MD whose salary is equivalent to the male faculty members. Between the other two female faculty members who are not oral and maxillofacial surgeons and MDs, one has general practice residency training, fellowship training (in special patient care, dental oncology, hospital dentistry), and board certification in oral medicine; and the other has general practice residency training.

Because of the small sample size, matched pair analyses were also conducted, where 3 female faculty were matched with male faculty and the 1 URM faculty was matched with non-URM faculty based on their series, rank, step, degree type, and gender (for URM and non-URM match). Additionally, the two female faculty members who were not oral surgeons and MDs were matched with each other.

Pair 1: The female assistant HS clinical professor in step 2 earned $\$ 115,000$ less $X+Y$ than the matched male assistant HS clinical professor in step 2. Both faculty had no advancements between 2014 and 2017. They both earned clinical degrees. The female faculty member is board certified in oral medicine (although oral medicine is technically not yet a recognized as a dental specialty by the American Dental Association), and the male faculty member is an MD and a specialist in oral and maxillofacial surgery. Both faculty members are White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the female faculty member has a much lower Y salary component $(\$ 12,400$ vs 127,400$)$ because she is a general dentist and is not an oral and maxillofacial surgeon and MD. The large difference in the $Y$ salaries is due to the differences in market factors for hiring general dentists and oral and maxillofacial surgeons (and MDs) in academics. The department chair uses the $Y$ component for faculty who are oral and maxillofacial surgeons to hire them at an $X+Y$ that is equivalent to the national mean salary for oral and maxillofacial surgeons in academics (i.e. $\$ 250,000$ ) in the U.S. The Y component is not dependent on patient care revenue generated. Neither faculty member have departmental administrative responsibilities. The male faculty member is a recent arrival to the department.

Pair 2: The female assistant HS clinical professor in step 3 earned $\$ 100,000$ less $X+Y$ than the matched male assistant HS clinical professor in step 3. Both faculty had one advancement between 2014 and 2017. They both earned a clinical degree. The male faculty member also is an MD and an oral and maxillofacial surgeon. The female faculty is White and the male faculty is Asian.

Reason for the difference in $X+Y$ : the female faculty member has a lower Y salary component ( $\$ 20,800$ vs $\$ 120,800$ ): the female faculty member has a much lower $Y$ salary component $(\$ 12,400$ vs 127,400$)$ because she is a general dentist and is not an oral and maxillofacial surgeon and MD. The large difference in the $Y$ salaries is due to


#### Abstract

the differences in market factors for hiring general dentists and oral and maxillofacial surgeons (and who are also MDs) in academics. The department chair uses the $Y$ component for faculty who are oral and maxillofacial surgeons to hire them at an $X+Y$ that is equivalent to the national mean salary for oral and maxillofacial surgeons in academics (i.e. $\$ 250,000$ ) in the U.S. The $Y$ component is not dependent on patient care revenue generated Also, while not calculated in the $X+Y$ difference, the male faculty member earns a $Z$ salary component $(\$ 6,000)$. This $Z$ component is based on revenue derived from clinical patient care as defined by the department's compensation plan. A portion of the Y salary component for the female faculty member is due to her leadership and administrative role in the department as director of the General Practice Residency Program and directorship of the Dental Oncology Program for the department.


Pair 3: The female assistant HS clinical professor in step 3 earned $\$ 25,000$ less $X+Y$ than the matched male assistant HS clinical professor in step 3. Both faculty members had one advancement between 2014 and 2017. They both earned a clinical degree and are MDs and oral and maxillofacial surgeons. The female faculty is White and the male faculty is Asian. Also, while not calculated in the $X+Y$ difference, the male faculty member earns a $Z$ salary component $(\$ 6,000)$ based on revenue derived from clinical patient care as defined by the department's compensation plan.

Reason for the difference in $X+Y$ : the female faculty has a lower $Y$ salary component because $20 \%$ of her time is dedicated to pursuing a PhD degree. However, the female faculty member carries a major component of the department's contributions to predoctoral teaching and dental school and campus committee representation.

Pair 4: The URM assistant HS clinical professor in step 3 earned $\$ 20,000$ more $X+Y$ than the matched non-URM assistant HS clinical professor in step 3. Both faculty had one advancement between 2014 and 2017. Both of members of this pair are male and are MDs and oral and maxillofacial surgeons. The URM faculty is African American and the non-URM faculty is Asian. Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the URM faculty member has a larger Y salary component ( $\$ 140,800$ vs $\$ 120,800$ ) because $\$ 20,000$ is due to a recruitment and retention incentive.

Pair 5: The female assistant HS clinical professor in step 2 earned $\$ 15,000$ less $X+Y$ than the matched female assistant HS clinical professor in step 3. Neither faculty member had advancements between 2014 and 2017. They both earned a clinical degree and had additional residency and/or fellowship training. The faculty member who is in step 2 is board certified in oral medicine (although oral medicine is technically not yet a recognized as a dental specialty by the American Dental Association). The faculty member who is in step 3 is Director of the General Practice Residency Program (located at LaGuna Honda Hospital) and the Dental Oncology Program.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the female faculty member at step 2 has a lower Y salary component ( $\$ 12,400$ vs $\$ 20,800$ ), because the part of the faculty member at step 3's $Y$ component is due to having administrative responsibilities as Director of the General Practice Residency (located at LaGuna Honda Hospital) and Director of the Dental Oncology Program. The X component of the salaries differ due to difference in step (step 2 vs 3).

Table 18: Characteristics of faculty at OMFS

|  | Gender |  | URM Status |  | Overall |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | URM | Non-URM |  |
| Overall | 3 (33.33\%) | 6 (66.67\%) | 1 (11.11\%) | 8 (88.89\%) | 9 |
| Series <br> Ladder rank In resident Clinical X HS clinical Adjunct | $\begin{gathered} 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 3(100.00 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \text { (16.67\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 5(83.33 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 1 \text { (100.00\%) } \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \text { (12.50\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 7 \text { (87.50\%) } \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \text { (11.11\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 8 \text { (88.89\%) } \\ 0(0.00 \%) \\ \hline \end{gathered}$ |
| Rank Assistant Associate Full | $\begin{gathered} 3 \text { (100.00\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \text { (66.67\%) } \\ 0(0.00 \%) \\ 2(33.33 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \text { (100.00\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6(75.00 \%) \\ 0(0.00 \%) \\ 2(25.00 \%) \end{gathered}$ | $\begin{gathered} 7 \text { (77.78\%) } \\ 0(0.00 \%) \\ 2(22.22 \%) \\ \hline \end{gathered}$ |
| $\begin{gathered} \hline \text { Step } \\ 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ \hline \end{gathered}$ | $0(0.00 \%)$ $1(33.33 \%)$ $2(66.67 \%)$ $0(0.00 \%)$ $0(0.00 \%)$ $0(0.00 \%)$ $0(0.00 \%)$ $0(0.00 \%)$ | $\begin{gathered} 0(0.00 \%) \\ 2(33.33 \%) \\ 2(33.33 \%) \\ 1(16.67 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 1(16.67 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0.00 \%) \\ 0(0.00 \%) \\ 1(100.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0.00 \%) \\ 3(37.50 \%) \\ 3(37.50 \%) \\ 1(12.50 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 1(12.50 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0.00 \%) \\ 3 \text { (33.33\%) } \\ 4 \text { (44.44\%) } \\ 1 \text { (11.11\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 1(11.11 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ |
| Degree type Clinical Research Combination Other | $\begin{gathered} 3 \text { (100.00\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \text { ( } 83.33 \%) \\ 0(0.00 \%) \\ 1 \text { (16.67\%) } \\ 0(0.00 \%) \end{gathered}$ | $\begin{gathered} 1 \text { (100.00\%) } \\ 0(0.00 \%) \\ 0(0.00 \%) \\ 0(0.00 \%) \end{gathered}$ | $\begin{gathered} 7 \text { ( } 87.50 \%) \\ 0(0.00 \%) \\ 1(12.50 \%) \\ 0(0.00 \%) \end{gathered}$ | $\begin{gathered} 8 \text { ( } 88.89 \%) \\ 0(0.00 \%) \\ 1 \text { (11.11\%) } \\ 0(0.00 \%) \end{gathered}$ |
| $\begin{aligned} & \text { X+Y salary } \\ & \text { Mean } \pm \text { SD } \\ & \text { Median } \\ & \hline \end{aligned}$ | $\begin{gathered} 170,000 \pm 48,218 \\ 150,000 \\ \hline \end{gathered}$ | $\begin{gathered} 278,050 \pm 28,904 \\ 272,500 \\ \hline \end{gathered}$ | $\begin{array}{r} 270,000 \\ 270,000 \\ \hline \end{array}$ | $\begin{gathered} 238,538 \pm 66,865 \\ 250,000 \\ \hline \end{gathered}$ | $\begin{gathered} 242,033 \pm 63,420 \\ 250,000 \\ \hline \end{gathered}$ |
| ```Z payment Mean mSD Median >0``` | $\begin{gathered} 0 \pm 0 \\ 0 \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12,238 \pm 14,689 \\ 8,250 \\ 4(66.67 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 18,195 \\ 18,195 \\ 1(100.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,904 \pm 13,443 \\ 0 \\ 3(37.50 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8,159 \pm 13,126 \\ 0 \\ 4(44.44 \%) \\ \hline \end{gathered}$ |
| Advancement <br> 0 <br> 1 <br> 2 | $\begin{gathered} 1 \text { (33.33\%) } \\ 2 \text { (66.67\%) } \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1 \text { (16.67\%) } \\ & 3(50.00 \%) \\ & 2(33.33 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 0(0.00 \%) \\ 1(100.00 \%) \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 2(25.00 \%) \\ & 4(50.00 \%) \\ & 2(25.00 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2 \text { (22.22\%) } \\ & 5 \text { (55.56\%) } \\ & 2(22.22 \%) \\ & \hline \end{aligned}$ |
| Accelerate Advancement | 0 (0.00\%) | 1 (16.67\%) | 0 (0.00\%) | 1 (12.50\%) | 1 (11.11\%) |

Table 19: Female/Male X+Y Salary Ratio

|  | Female/Male Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.5989 | $(0.4522,0.7930)$ | 0.0035 |

Table 20: URM/non-URM X+Y Salary Ratio

|  | URM/non-URM Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 1.1785 | $(0.5333,2.6036)$ | 0.6393 |

Table 21: OMFS Matched Pair $X+Y$, Advancement and Accelerated Advancement

| Pair | URM Status | Gender | Series | Rank | Step | Degree | X | Y | X+Y | Z | \# Adv | \# Accl | Difference in $X+Y$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Non URM | F | HS Clin | Assist | 2 | Clinical | 122,600 | 12,400 | 135,000 | 0 | 0 | 0 | -115,000 |
|  | Non URM | M | HS Clin | Assist | 2 | Clinical | 122,600 | 127,400 | 250,000 | 0 | 0 | 0 |  |
| 2 | Non URM | F | HS Clin | Assist | 3 | Clinical | 129,200 | 20,800 | 150,000 | 0 |  | 0 | -100,000 |
|  | Non URM | M | HS Clin | Assist | 3 | Clinical | 129,200 | 120,800 | 250,000 | 6,000 | 1 | 0 |  |
| 3 | Non URM | F | HS Clin | Assist | 3 | Clinical | 129,200 | 95,800 | 225,000 | 0 | 1 | 0 | -25,000 |
|  | Non URM | M | HS Clin | Assist | 3 | Clinical | 129,200 | 120,800 | 250,000 | 6,000 | 1 | 0 |  |
| 4 | URM | M | HS Clin | Assist | 3 | Clinical | 129,200 | 140,800 | 270,000 | 0 | 1 | 1 | 20,000 |
|  | Non URM | M | HS Clin | Assist | 3 | Clinical | 129,200 | 120,800 | 250,000 | 6,000 | 1 | 0 |  |
| 5 | Non URM | F | HS Clin | Assist | 2 | Clinical | 122,600 | 12,400 | 135,000 | 0 | 0 | 0 | -15,000 |
|  | Non URM | F | HS Clin | Assist | 3 | Clinical | 129,200 | 20,800 | 150,000 | 0 | 1 | 0 |  |

## Oral Facial Sciences (OFS)

OFS: There are 11 female and 14 male faculty, and 2 URM and 23 non-URM faculty in OFS. No faculty received $Z$ payment. One female and two male non-URM faculty received one accelerated advancement. Females had slightly lower $X+Y$ payment and smaller odds for advancement than males, but the differences were not statistically significant. URM faculty had slightly higher $\mathrm{X}+\mathrm{Y}$ payment and smaller odds for advancement, but the differences were not statistically significant.

Because of the small sample size, matched pair analyses were also conducted, where the 11 female faculty were matched with male faculty and the 2 URM faculty was matched with nonURM faculty based on their series, rank, step, degree type and gender (URM and non-URM match). If no match was found based on all the criteria, a faculty was matched as close as possible.

Pair 1: The female assistant HS clinical professor in step 1 earned $\$ 45,000$ more $X+Y$ than the matched male assistant adjunct professor in step 1. Both faculty had no advancements between 2014 and 2017. The female faculty has other degrees (non-clinical, non-research) and is Asian, and the male faculty has clinical and research degrees and is White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : The female faculty member receives a higher Y component to her salary ( $\$ 49,000$ vs $\$ 4,000$ respectively) because she is a clinicianspecialist (periodontist) with additional clinical responsibilities as director of the Predoctoral Periodontics Program.

Pair 2: The female assistant HS clinical professor in step 2 earned $\$ 10,000$ more $X+Y$ than the matched male assistant HS clinical professor in step 3. The female faculty had no advancement while the male faculty had one advancement between 2014 and 2017. Both the faculty earned a clinical degree and are White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : The female faculty member received a higher Y component to her salary ( $\$ 63,400$ vs $\$ 48,200$, respectively) as part of her start-up packet (in 2017-18 she was still within the first 2 years of her recruitment date). The male faculty member is a pediatric dentistry specialist whose initial Y component was much higher (in his first 3 years after recruitment), but his Y in FY 2017-18 was decreased because he was not generating sufficient clinical revenue to cover it, and as a result the faculty practice was in financial deficit.

Reason for the difference in advancement: The chair reported the female faculty's effective start date was December 1, 2016 because she went on maternity leave shortly after her recruitment date in June 2016, whereas the male faculty started in July 2014.

Pair 3: The female assistant professor in adjunct rank step 3 earned $\$ 23,290$ less $X+Y$ than the matched male assistant professor in residence rank step 3. The female faculty had no advancement while the male faculty had one advancement between 2014 and 2017. The female faculty member has a research degree (PhD) and the male faculty member has a combination of clinical and research degrees (DDS, PhD) and is a specialist in orthodontics. Both faculty members are Asian.

Reason for the difference in $X+Y$ : the female faculty member had a lower $Y$ component ( $\$ 14,910$ vs $\$ 38,200$, respectively). The $Y$ is based on research funding and/or clinical patient care revenue.
Reason for the difference in advancement: the female faculty member chose not to seek a merit increase because she had no independent research funding. The female faculty member is in the Adjunct series while the male faculty member is in the In Residence series.

Pair 4: The female associate HS clinical professor in step 1 earned \$15,250 less $X+Y$ than the matched male associate clinical $X$ professor in step 2. The female faculty had one accelerated advancement and the male faculty had one regular advancement between 2014 and 2017. The female faculty earned a clinical degree and is White. The male faculty earned clinical and research degrees and is Asian.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : different steps and difference in Y component of salary. The female is HS Clinical step 1 while the male faculty is Clinical X rank step 2. The female faculty member had a lower $Y$ salary component ( $\$ 66,900$ vs $\$ 76,150$, respectively) due to differences in revenue generated form patient care. The male faculty member provides patient care for operating room cases as a specialist in pediatric dentistry, and this has the potential to generate more revenue than ambulatory patient care that the female faculty member provides as a specialist in periodontics.

Pair 5: The female associate clinical $X$ professor in step 2 earned $\$ 25,500$ less $X+Y$ than the matched male associate clinical $X$ professor in step 2. Both faculty had one advancement between 2014 and 2017. They both earned clinical and research degrees and are Asian.

Reason for the difference in $X+Y$ : the female faculty member had a lower $Y$ salary component ( $\$ 50,650$ vs $\$ 76,150$ ).
Reason for difference in Y : The male faculty member is the director of the Pediatric Dentistry Residency Program (15 residents) and generated much of his Y from patient care in the operating room, where he also teaches residents. The female faculty member devotes a lot of her time in the laboratory conducting research and chooses to devote less time to teaching and patient care than the male faculty member. She generates less revenue from patient care and research to contribute to the Y component of her salary.

Pair 6: The female ladder rank full professor in step 5 earned \$ 150,000 less $X+Y$ than the matched male ladder rank full professor in step 5 . Both faculty members had one advancement between 2014 and 2017. Both the female male faculty earned clinical and research degrees. The female faculty is Hispanic URM and the male faculty is White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : The male faculty member is in scale 6 due to a special provision granted by Dr. Sally Marshall (former VPAA) and has a joint appointment in the School of Medicine, Department of Pathology. The female faculty member is in scale 3, as are the remaining members of the OFS faculty. Additionally, the male faculty has a higher Y component ( $\$ 194,400$ vs $\$ 92,200$, respectively). The male faculty member's Y is completely generated by his faculty practice. He also has a joint appointment in the Department of Pathology in the SOM where the salaries are much higher, due to the high level of responsibility and liability inherent to histopathological diagnostic decision making. Both the male and female faculty members are chairs of their divisions.

Pair 7: The female clinical $X$ full professor in step 2 earned $\$ 28,603$ more $X+Y$ than the matched male clinical $X$ full professor in step 2. The female faculty member had two advancements and the male faculty had one advancement between 2014 and 2017. The female earned a clinical degree and the male faculty earned clinical and research degrees. The female faculty is Asian and non-URM and the male faculty is a URM (Hispanic).

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the female faculty member had a higher Y salary component ( $\$ 45,393$ vs $\$ 16,700$ ).
Reason for difference in Y : the difference in the Y salary component is due to the female faculty member practicing in orthodontics and treating patients with craniofacial anomalies, both of which generate higher clinical revenue than patient care in oral medicine practice, which is the specialty of the male faculty member.

Reason for the difference in advancement: The chair reports the male faculty was originally in the ladder rank series, but has not been getting grants since 2008. Thus his advancement was delayed within the ladder rank series. He was counseled by the previous department chair to switch to the Clinical $X$ series so he would continue his advancement in that series because it did not require the same level of research productivity. However the male faculty member initially declined. He finally requested to switch series in 2015-16, and was granted his most recent advancement.

Pair 8: The female ladder rank full professor in step 8 earned the same amount of $\mathrm{X}+\mathrm{Y}$ as the matched male ladder rank full professor in step 8 . Both faculty had one advancement between 2014 and 2017. They both earned a clinical degree and are White.

Pair 9: The female ladder rank full professor in step 3 earned $\$ 77,130$ less $X+Y$ than the matched male ladder rank full professor in step 3 . The female faculty had one advancement and the male faculty had two advancements including one accelerated advancement between 2014 and 2017. They both earned combination degrees for clinical and research and are White.

Reason for the difference in $X+Y$ : the male faculty member has a higher $Y$ salary component $(\$ 187,930$ vs $\$ 110,800)$. The greater $Y$ for the male faculty member is due to his recruitment package, more sponsored research support, being a division chair in his department in the SOD and also a division chief in the SOM, and he is director of the Program in Cranio-facial Biology. The female faculty member is department chair and has research funding support and an endowed chair.

Reason for the difference in advancement: The accelerated advancement for the male faculty was requested by the Chair of Pediatrics, in agreement with the Chair of OFS (his primary department) when he accepted the position as Chief of Genetics in the Department of Pediatrics in addition to being chair of the Division of Craniofacial Anomalies in the Department of OFS, and Director of the Program in Cranio-facial Biology. The female faculty member is currently being reviewed for an accelerated merit for FY2018-19.

Pair 10: The female ladder rank full professor in step 2 earned $\$ 45,700$ more $X+Y$ than the matched male ladder rank full professor in step 2. The female faculty had no advancement and the male faculty had one accelerated advancement between 2014 and 2017. They both earned clinical and research degrees. The female faculty is White while the male faculty is Asian. Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : The female faculty member had a higher Y salary component ( $\$ 45,700$ vs none, respectively). This is due to the female faculty member having been recently (2015) recruited, bringing with her an extensive sponsored research portfolio. Her Y salary component is generated from her grants, and was
negotiated as part of her recruitment packet, which came in-part from the Chancellor's mid-career faculty recruitment program.
Reason for the difference in advancement: The female faculty has not had an appointment long enough to have an ordinary merit advancement.

Pair 11: The female full professor in-residence in step 7 earned $\$ 102,300$ less $X+Y$ than the matched male ladder rank full professor in step 6 . Neither faculty member had an advancement between 2014 and 2017. The female faculty earned a research degree and the male faculty earned clinical and research degrees. Both faculty are Asian.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the male faculty member had a Y salary component and the female faculty had no Y salary component. The male faculty member is a specialist in orthodontics and has leadership roles as division chair of the Division of Orthodontics and CEO of the Dental Center. The female faculty member did not have sufficient research funding to have a Y component to her salary.

Pair 12: The Hispanic URM full clinical $X$ professor in step 2 earned $\$ 60,000$ less $X+Y$ than the matched White non-URM HS clinical professor in step 2. Both faculty had one advancement between 2014 and 2017. The URM faculty earned clinical and research degrees and is a specialist in oral medicine, and the non-URM faculty earned a clinical degree and is a specialist in pediatric dentistry. Both faculty are male.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the URM faculty had a lower Y salary component than the non-URM faculty ( $\$ 16,700$ vs 76,700 ). This difference is due to clinical practice in pediatric dentistry including treatment of cases in the operating room and generating more revenue than the ambulatory clinical practice of oral medicine. The Y component of their salary is based on practice-generated revenue.

Table 22: Characteristics of faculty at OFS

|  | Gender |  | URM Status |  | Overall |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | URM | Non-URM |  |
| Overall | $11(44.00 \%)$ | $14(56.00 \%)$ | $2(8.00 \%)$ | $23(92.00 \%)$ | 25 |
| Series |  |  |  |  |  |
| Ladder rank | $4(36.36 \%)$ | $5(35.71 \%)$ | $1(50.00 \%)$ | $8(34.78 \%)$ | $9(36.00 \%)$ |
| In resident | $1(9.09 \%)$ | $1(7.14 \%)$ | $0(0.00 \%)$ | $2(8.70 \%)$ | $2(8.00 \%)$ |
| Clinical X | $2(18.18 \%)$ | $2(14.29 \%)$ | $1(50.00 \%)$ | $3(13.04 \%)$ | $4(16.00 \%)$ |
| HS clinical | $3(27.29 \%)$ | $4(28.57 \%)$ | $0(0.00 \%)$ | $7(30.43 \%)$ | $7(28.00 \%)$ |
| Adjunct | $1(9.09 \%)$ | $2(14.29 \%)$ | $0(0.00 \%)$ | $3(13.04 \%)$ | $3(12.00 \%)$ |
| Rank |  |  |  |  |  |
| Assistant | $3(27.27 \%)$ | $3(21.43 \%)$ | $0(0.00 \%)$ | $6(26.09 \%)$ | $6(24.00 \%)$ |
| Associate | $2(18.18 \%)$ | $1(7.14 \%)$ | $0(0.00 \%)$ | $3(13.04 \%)$ | $3(12.00 \%)$ |
| Full | $6(54.55 \%)$ | $10(71.43 \%)$ | $2(100.00 \%)$ | $14(60.87 \%)$ | $16(64.00 \%)$ |
| Step |  |  |  |  |  |
| 1 | $2(18.18 \%)$ | $2(14.29 \%)$ | $0(0.00 \%)$ | $4(17.39 \%)$ | $4(16.00 \%)$ |
| 2 | $4(36.36 \%)$ | $4(28.57 \%)$ | $1(50.00 \%)$ | $7(30.43 \%)$ | $8(32.00 \%)$ |
| 3 | $2(18.18 \%)$ | $4(28.57 \%)$ | $0(0.00 \%)$ | $6(26.09 \%)$ | $6(24.00 \%)$ |
| 4 | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ |
| 5 | $1(9.09 \%)$ | $2(14.29 \%)$ | $1(50.00 \%)$ | $2(8.70 \%)$ | $3(12.00 \%)$ |
| 6 | $0(0.00 \%)$ | $1(7.14 \%)$ | $0(25.00 \%)$ | $1(4.35 \%)$ | $1(4.00 \%)$ |
| 7 | $1(9.09 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $1(4.35 \%)$ | $1(4.00 \%)$ |
| 8 | $1(9.09 \%)$ | $1(7.14 \%)$ | $0(0.00 \%)$ | $2(8.70 \%)$ | $2(8.00 \%)$ |


| Degree type |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Clinical | $4(36.36 \%)$ | $5(35.71 \%)$ | $0(0.00 \%)$ | $9(39.13 \%)$ | $9(36.00 \%)$ |
| Research | $2(18.18 \%)$ | $1(7.14 \%)$ | $1(50.00 \%)$ | $2(8.70 \%)$ | $3(12.00 \%)$ |
| Combination | $4(36.36 \%)$ | $8(57.14 \%)$ | $1(50.00 \%)$ | $11(47.83 \%)$ | $12(48.00 \%)$ |
| Other | $1(9.09 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $1(4.35 \%)$ | $1(4.00 \%)$ |
| X+Y salary |  |  |  |  |  |
| Mean $\pm$ SD | $191,824 \pm 47,633$ | $209,246 \pm 90,782$ | $215,000 \pm 77,782$ | $200,413 \pm 75,454$ | $201,580 \pm 74,076$ |
| Median | 188,603 | 189,825 | 215,000 | 188,603 | 188,603 |
| Z payment | $0 \pm 0$ | $0 \pm 0$ | $0 \pm 0$ | $0 \pm 0$ | $0 \pm 0$ |
| Mean $\pm$ SD | 0 | 0 | 0 | 0 | 0 |
| Median | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ |
| $>0$ | $6(54.55 \%)$ | $4(28.57 \%)$ | $1(50.00 \%)$ | $9(39.13 \%)$ | $10(40.00 \%)$ |
| Advancement | $4(36.36 \%)$ | $9(64.29 \%)$ | $1(50.00 \%)$ | $12(52.17 \%)$ | $13(52.00 \%)$ |
| 0 | $1(9.09 \%)$ | $1(7.14 \%)$ | $0(0.00 \%)$ | $2(8.70 \%)$ | $2(8.00 \%)$ |
| 1 |  | $2(14.29 \%)$ | $0(0.00 \%)$ | $3(13.04 \%)$ | $3(12.00 \%)$ |
| 2 | $1(9.09 \%)$ |  |  |  |  |
| Accelerated |  |  |  |  |  |
| Advancement |  |  |  |  |  |

Table 23: Female/Male X+Y Salary Ratio

|  | Female/Male Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.9295 | $(0.7003,1.2337)$ | 0.5983 |
| Adjusted | 0.9462 | $(0.6803,1.3160)$ | 0.7093 |

Table 24 URM/non-URM X+Y Salary Ratio

|  | URM/non-URM Ratio | $95 \% \mathrm{CI}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 1.0765 | $(0.6399,1.8112)$ | 0.7720 |

Table 25: Female vs. Male Odds Ratio for Advancement

|  | Odds Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.4122 | $(0.0770,2.2068)$ | 0.2851 |
| Adjusted | 0.0923 | $(0.0019,4.4302)$ | 0.2002 |

Table 26: URM vs. non-URM Odds Ratio for Advancement

|  | Odds Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.5756 | $(0.0306,10.8281)$ | 0.7000 |

Table 27: Accelerated Advancement by Gender between 2014 and 2017

|  | Female | Male | Odds Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Accelerated <br> advancement | $1(9.09 \%)$ | $2(14.29 \%)$ | 0.6000 | $(0.0410,8.7857)$ | 0.6974 |

Table 28: OFS Female and Male Matched Pair X+Y, Advancement and Accelerated Advancement

| Pair | URM Status | Gender | Series | Rank | Step | Degree | X | Y | X+Y | Z | \# Adv | \# Accl | Difference in $\mathbf{X + Y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Non URM | F | HS Clin | Assist | 1 | Other | 91,000 | 49,000 | 140,000 | 0 | 0 | 0 | 45,000 |
|  | Non URM | M | Adjunct | Assist | 1 | Combin | 91,000 | 4,000 | 95,000 | 0 | 0 | 0 |  |
| 2 | Non URM | F | HS Clin | Assist | 2 | Clinical | 96,600 | 63,400 | 160,000 | 0 | 0 | 0 | 10,000 |
|  | Non URM | M | HS Clin | Assist | 3 | Clinical | 101,800 | 48,200 | 150,000 | 0 | 1 | 0 |  |
| 3 | Non URM | F | Adjunct | Assist | 3 | Combin | 101,800 | 14,910 | 116,710 | 0 | 0 | 0 | -23,290 |
|  | Non URM | M | In Res | Assist | 3 | Combin | 101,800 | 38,200 | 140,000 | 0 | 1 | 0 |  |
| 4 | Non URM | F | HS Clin | Assoc | 1 | Clin | 113,300 | 66,900 | 180,200 | 0 | 1 | 1 | -15,250 |
|  | Non URM | M | Clin X | Assoc | 2 | Combin | 119,300 | 76,150 | 195,450 | 0 | 1 | 0 |  |
| 5 | Non URM | F | Clin X | Assoc | 2 | Combin | 119,300 | 50,650 | 169,950 | 0 | 1 | 0 | -25,500 |
|  | Non URM | M | Clin X | Assoc | 2 | Combin | 119,300 | 76,150 | 195,450 | 0 | 1 | 0 |  |
| 6 | URM | F | Ladder | Full | 5 | Research | 177,800 | 92,200 | 270,000 | 0 | 0 | 0 | -150,000 |
|  | Non URM | M | Ladder | Full | 5 | Combin | 225,600 | 194,400 | 420,000 | 0 | 1 | 0 |  |
| 7 | URM | M | Clin X | Full | 2 | Combin | 143,300 | 16,700 | 160,000 | 0 | 2 | 0 | -28,603 |
|  | Non URM | F | Clin X | Full | 2 | Clinical | 143,300 | 45,303 | 188,603 | 0 | 1 | 0 |  |
| 8 | Non URM | F | Ladder | Full | 8 | Clinical | 223,900 | 0 | 223,900 | 0 | 1 | 0 | 0 |
|  | Non URM | M | Ladder | Full | 8 | Clinical | 223,900 | 0 | 223,900 | 0 | 1 | 0 |  |
| 9 | Non URM | F | Ladder | Full | 3 | Combin | 154,200 | 110,800 | 265,000 | 0 | 1 | 0 | -77,130 |
|  | Non URM | M | Ladder | Full | 3 | Combin | 154,200 | 187,930 | 342,130 | 0 | 2 | 1 |  |
| 10 | Non URM | F | Ladder | Full | 2 | Combin | 143,300 | 45,700 | 189,000 | 0 | 0 | 0 | 45,700 |
|  | Non URM | M | Ladder | Full | 2 | Combin | 143,300 | 0 | 143,300 | 0 | 1 | 1 |  |
| 11 | Non URM | F | Ladder | Full | 7 | Research | 206,700 | 0 | 206,700 | 0 | 0 | 0 | -102,300 |
|  | Non URM | M | Ladder | Full | 6 | Combin | 191,700 | 117,300 | 309,000 | 0 | 0 | 0 |  |
| 12 | URM | M | Clin X | Full | 2 | Combin | 143,300 | 16,700 | 160,000 | 0 | 1 | 0 | -60,000 |
|  | Non URM | M | HS Clin | Full | 2 | Clinical | 143,300 | 76,700 | 220,000 | 0 | 1 | 0 |  |

## Preventive and Restorative Dental Sciences (PRDS)

PRDS: There are 16 female and 18 male faculty, and 4 URM and 30 non-URM faculty in PRDS (Table 29). Six faculty received $Z$ payments. Two female and one male non-URM faculty received one accelerated advancement. Females had lower mean $X+Y$ salary, however the unadjusted and adjusted female to male $X+Y$ salary ratios were not statistically significant from 1.0 (Table 30). The URM/non-URM X+Y salary ratio was noticeably below 1.0 but not statistically significant (Table 31).Females had slightly higher odds ratio for receiving any $Z$ payment and the female to male unadjusted $Z$ payment ratio was markedly below 1.0, although neither were statistically significant (Table 32). Females had higher unadjusted and adjusted odds for advancement than males, however, both the differences were not statistically significant (Table 34). URM faculty had noticeably lower but not statistically significant unadjusted odds for advancement (Table 35). Females had greater odds for accelerated advancement between 2014 and 2017, however there was a small number of any male or female faculty members having accelerated advancement ( $n=2$ females and $n=1$ male) (Table 36). Additionally, no URM faculty had an accelerated advancement (Table 37).

Because of the small sample size of URM faculty, matched pair analyses were conducted to explore differences in $X+Y$ salary between URM and non-URM faculty (Table 41). Four URM faculty were matched with non-URM faculty based on their series, rank, step, degree type and gender. If no match was found based on all the criteria, a URM faculty member was matched as close as possible (Table 38).

Pair 1: The URM assistant adjunct professor in step 1 earned $\$ 11,000$ less $X+Y$ than the matched non-URM assistant HS clinical professor in step 3. The URM faculty had no advancements and the non-URM faculty had one advancement between 2014 and 2017. Both faculty earned a clinical degree. The URM faculty is African American and the non-URM faculty is Asian.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : different series and steps. The URM faculty is in adjunct series step 1 while the non-URM faculty is in HS Clinical series step 3. Reason for the difference in advancement: The URM faculty member has not had an appointment at UCSF long enough to have had an advancement.

Pair 2: The URM assistant adjunct professor in step 1 earned same amount of $X+Y$ as the matched non-URM assistant HS clinical professor in step 1. Both faculty had no advancement. The URM faculty is African American and earned a research degree, and the non-URM faculty is Asian and earned clinical and research degrees.

Pair 3: The URM full HS clinical professor in step 6 earned $\$ 120,750$ more $X+Y$ than the matched non-URM full HS clinical professor in step 6. Both faculty had one advancement
between 2014 and 2017. They both earned clinical degrees. The URM faculty is African American and the non-URM faculty is White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : The difference is due to the URM faculty member having a $Y$ salary component due to an associate dean's level administrative position and revenue from patient care. The non-URM faculty member does not have a Y salary component. Additionally, the URM faculty member's scale=2 while the non-URM faculty member's scale $=1$.

Pair 4: The URM ladder rank full professor in step 5 earned $\$ 6,400$ less $X+Y$ than the matched non-URM ladder rank full professor in step 5. The URM faculty had two advancements and the matched non-URM faculty had one advancement between 2014 and 2017. Both faculty earned clinical and research degrees. The URM faculty is African American and the non-URM faculty is White.

Reason for the difference in $\mathrm{X}+\mathrm{Y}$ : the non-URM faculty member has a Y component to his salary $(\$ 6,400)$ generated from research funding while the URM faculty member does not have research or patient care funding to support a $Y$ component to his salary. Reason for the difference in advancement: The URM faculty member has been on faculty at UCSF for 6+ years and the timing allowed for 2 advancements, while the nonURM faculty member elected to submit for the next advancement in 2017.

Table 29: Characteristics of faculty at PRDS

|  | Gender |  | URM Status |  | Overall |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | URM | Non-URM |  |
| Overall | $16(47.06 \%)$ | $18(52.94 \%)$ | $4(11.76)$ | $30(88.24)$ |  |
| Series |  |  |  |  | 34 |
| Ladder rank | $3(18.75 \%)$ | $8(44.44 \%)$ | $1(25.00 \%)$ | $10(33.33 \%)$ | $11(32.35 \%)$ |
| In resident | $1(6.25 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $1(3.33 \%)$ | $1(2.94 \%)$ |
| Clinical X | $2(12.50 \%)$ | $1(5.56 \%)$ | $0(0.00 \%)$ | $3(10.00 \%)$ | $3(8.82 \%)$ |
| HS clinical | $7(43.75 \%)$ | $7(38.89 \%)$ | $1(25.00 \%)$ | $13(43.33 \%)$ | $14(41.18 \%)$ |
| Adjunct | $3(18.75 \%)$ | $2(11.11 \%)$ | $2(50.00 \%)$ | $3(10.00 \%)$ | $5(14.71 \%)$ |
| Rank |  |  |  |  |  |
| Assistant | $2(12.50 \%)$ | $3(16.67 \%)$ | $2(50.00 \%)$ | $3(10.00 \%)$ | $5(14.71 \%)$ |
| Associate | $7(43.75 \%)$ | $4(22.22 \%)$ | $0(0.00 \%)$ | $11(36.67 \%)$ | $11(32.35 \%)$ |
| Full | $7(43.75 \%)$ | $11(61.11 \%)$ | $2(50.00 \%)$ | $16(53.33 \%)$ | $18(52.94 \%)$ |
| Step |  |  |  |  |  |
| 1 | $6(37.50 \%)$ | $2(11.11 \%)$ | $2(50.00 \%)$ | $6(20.00 \%)$ | $8(23.53 \%)$ |
| 2 | $2(12.50 \%)$ | $2(11.11 \%)$ | $0(0.00 \%)$ | $4(13.33 \%)$ | $4(11.76 \%)$ |
| 3 | $5(31.25 \%)$ | $3(16.67 \%)$ | $0(0.00 \%)$ | $8(26.67 \%)$ | $8(23.53 \%)$ |
| 4 | $2(12.50 \%)$ | $3(16.67 \%)$ | $0(0.00 \%)$ | $5(16.67 \%)$ | $5(14.71 \%)$ |
| 5 | $1(6.25 \%)$ | $3(16.67 \%)$ | $1(25.00 \%)$ | $3(10.00 \%)$ | $4(11.76 \%)$ |
| 6 | $0(0.00 \%)$ | $2(11.11 \%)$ | $1(25.00 \%)$ | $1(3.33 \%)$ | $2(5.88 \%)$ |
| 7 | $0(0.00 \%)$ | $3(16.67 \%)$ | $0(0.00 \%)$ | $3(10.00 \%)$ | $3(8.82 \%)$ |
| 8 | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $0.00(0.00 \%)$ | $0(0.00 \%)$ |
| Degree type | $7(43.75 \%)$ | $10(55.56 \%)$ | $2(50.00 \%)$ | $15(50.00 \%)$ | $17(50.00 \%)$ |
| Clinical | $7(43.75 \%)$ | $5(27.78 \%)$ | $1(25.00 \%)$ | $11(36.67 \%)$ | $12(35.29 \%)$ |
| Research | $2(12.50 \%)$ | $3(16.67 \%)$ | $1(25.00 \%)$ | $4(13.33 \%)$ | $5(14.71 \%)$ |
| Combination | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ | $0(0.00 \%)$ |
| Other |  |  |  |  |  |


| $\mathrm{X}+\mathrm{Y}$ salary Mean $\pm$ SD Median | $\begin{gathered} 152,889 \pm 57,833 \\ 144,150 \\ \hline \end{gathered}$ | $\begin{gathered} 171,967 \pm 66,492 \\ 160,600 \\ \hline \end{gathered}$ | $\begin{gathered} 153,763 \pm 94,039 \\ 124,050 \\ \hline \end{gathered}$ | $\begin{gathered} 164,219 \pm 59,160 \\ 153,900 \\ \hline \end{gathered}$ | $\begin{gathered} 162,989 \pm 62,381 \\ 153,900 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ```Z payment Mean }\pm\mathrm{ SD Median >0``` | $\begin{gathered} 4,072 \pm 13,759 \\ 0 \\ 3(18.75 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12,568 \pm 32,960 \\ 0 \\ 3(16.67 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \pm 0 \\ 0 \\ 0(0.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9,713 \pm 27,283 \\ 0 \\ 6(20.00 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8,570 \pm 25,772 \\ 0 \\ 6(17.65 \%) \\ \hline \end{gathered}$ |
| ```Advancement 0 1 2``` | $\begin{aligned} & 4 \text { (25.00\%) } \\ & 3 \text { (18.75\%) } \\ & 9 \text { (56.25\%) } \\ & \hline \end{aligned}$ | $\begin{aligned} & 4 \text { (22.22\%) } \\ & 7 \text { (38.89\%) } \\ & 7 \text { (38.89\%) } \\ & \hline \end{aligned}$ | $\begin{aligned} & 2 \text { (50.00\%) } \\ & 1 \text { (25.00\%) } \\ & 1 \text { (25.00\%) } \end{aligned}$ | $\begin{gathered} 6 \text { (20.00\%) } \\ 9 \text { (30.00\%) } \\ 15 \text { (50.00\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 8 \text { (23.53\%) } \\ 10 \text { (29.41\%) } \\ 16 \text { (47.06\%) } \\ \hline \end{gathered}$ |
| Accelerated Advancement | 2 (12.50\%) | 1 (5.56\%) | 0 (0.00\%) | 3 (10.00\%) | 3 (8.82\%) |

Table 30: Female/Male X+Y Salary Ratio

|  | Female/Male Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.9116 | $(0.7086,1.1726)$ | 0.4592 |
| Adjusted | 1.0238 | $(0.8379,1.2508)$ | 0.8079 |

Table 31: URM/non-URM X+Y Salary Ratio

|  | URM/non-URM Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.8602 | $(0.5826,1.2701)$ | 0.4371 |

Table 32: Female/Male Z Payment Ratio and Odds Ratio for Any Z Payment

|  | Amount of Z Payment |  |  | Having any Z Payment |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female/Male <br> Ratio | $95 \% \mathrm{Cl}$ | P value | Odds <br> Ratio | $95 \% \mathrm{Cl}$ | P value |
|  | 0.1607 | $(0.0094,2.7335)$ | 0.1477 | 1.1538 | $(0.1844,7.2184)$ | 0.8747 |

Table 33: URM/non-URM Z Payment Ratio and Odds Ratio for Any Z Payment

|  | Amount of Z Payment |  |  | Having any Z Payment |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | URM/non- <br> URM Ratio | $95 \% \mathrm{Cl}$ | P value | Odds <br> Ratio | $95 \% \mathrm{Cl}$ | P value |
|  | 0.1607 | $(0.0094,2.7335)$ | 0.1477 | 1.1538 | $(0.1844,7.2184)$ | 0.8747 |

Table 34: Female vs. Male Odds Ratio for Advancement

|  | Odds Ratio | $95 \% \mathrm{CI}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 1.5246 | $(0.4026,5.7735)$ | 0.5230 |
| Adjusted | 2.5597 | $(0.3427,19.1167)$ | 0.3402 |

Table 35: URM vs. non-URM Odds Ratio for Advancement

|  | Odds Ratio | $95 \% \mathrm{CI}$ | P value |
| :--- | :---: | :---: | :---: |
| Unadjusted | 0.2783 | $(0.0341,2.2685)$ | 0.2231 |

Table 36: Accelerated Advancement by Gender between 2014 and 2017

|  | Female | Male | Odds Ratio | $95 \% \mathrm{Cl}$ | P value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Accelerated <br> advancement | $2(12.50 \%)$ | $1(5.56 \%)$ | 2.4286 | $(0.1802,32.7233)$ | 0.4921 |

Table 37: Accelerated Advancement by URM status between 2014 and 2017

|  | URM | Non-URM | Odds Ratio | $95 \% \mathrm{CI}$ | P value |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Accelerated <br> advancement | $0(0.00 \%)$ | $3(10.00 \%)$ | 0 | - | 0.9796 |

Continued on next page

Table 38: PRDS URM and non URM Matched Pair X+Y, Advancement and Accelerated Advancement

| Pair | URM Status | Gender | Series | Rank | Step | Degree | X | Y | X+Y | Z | \# Adv | \# Accl | Difference in $X+Y$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | URM | F | Adjunct | Assist | 1 | Clinical | 84,000 | 0 | 84,000 | 0 | 0 | 0 |  |
|  | Non URM | F | Adjunct | Assist | 3 | Clinical | 95,000 | 0 | 95,000 | 0 | 1 | 0 | -11,000 |
| 2 | URM | M | Adjunct | Assist | 1 | Research | 84,000 | 0 | 84,000 | 0 | 0 | 0 |  |
|  | Non URM | M | Adjunct | Assist | 1 | Combin | 84,000 | 0 | 84,000 | 0 | 0 | 0 | 0 |
| 3 | URM | M | HS Clin | Full | 6 | Clinical | 176,900 | 106,050 | 282,950 | 0 | 1 | 0 |  |
|  | Non URM | M | HS Clin | Full | 6 | Clinical | 162,200 |  | 162,200 | 0 | 2 | 0 | 120,750 |
| 4 | URM | M | Ladder | Full | 5 | Combin | 164,100 | 0 | 164,100 | 0 | 2 | 0 |  |
|  | Non URM | M | Ladder | Full | 5 | Combin | 164,100 | 6,400 | 170,500 | 0 | 1 | 0 | 6,400 |

## Conclusion and Discussion

At the school-wide level there were too few URM faculty in SOD to identify a statistically significant difference in $\mathrm{X}+\mathrm{Y}$ salary, Z payment, advancement, and accelerated advancement by URM status. A matched pair analysis selected non-URM faculty matched to the seven URM faculty member based on series, rank, step, degree type and department when possible. Five URM faculty members made less $X+Y$ and two URM faculty members made more $X+Y$ than their matched non-URM faculty. Reasons for the lower pay in three URM cases include different degree type and different department.

After adjusting for series, rank, step, degree type and department, there were no statistically significant differences by gender in $X+Y$ salary, $Z$ payment, and advancement.

Matched pair analysis of low salary outliers, i.e. faculty with <75\% of predicted salaries estimated using Campus-wide regression models indicated reasonable, non-discriminatory explanations based on business practices or other factors for each of lower than modelpredicted salaries.

There were statistically significant differences in $X+Y$ salary by series, rank, and step after full adjustment (gender, URM status, series, rank, step, degree type, and department). Specifically, adjunct faculty made $76.01 \%$ that of ladder rank ( $p=0.0094$ ) with $95 \% \mathrm{Cl}$ ( $61.96 \%, 93.25 \%$ ). Assistant professors made statistically significant less $X+Y$ salary than associate professors ( $p=0.0024$ ) and full professors ( $p<0.0001$ ), and associate professors made statistically significant less $\mathrm{X}+\mathrm{Y}$ salary than full professor $(p=0.0044)$.

After full adjustment for gender, URM status, series, rank, step, and degree type, there were statistically significant differences in $X+Y$ salary and advancement by department. Specifically, PRDS faculty made statistically significant less $X+Y$ salary than OMFS faculty ( $p<0.0001$ ) and OFS faculty ( $p<0.0001$ ), CTB and OSF faculty made statistically significant less $X+Y$ salary than OMFS faculty ( $p \leq 0.0002$ ). OFS had 0.0987 and 0.1425 odds ratios of having one more merit/promotion between 2014 and 2017 than PRDS and OMFS.

## Appendix on next page

## Appendix:

Table A1: $\mathrm{X}+\mathrm{Y}$ salary by series for the SOD

| Series | n | Mean $\pm$ SD | Median | $(\min , \max )$ |
| :--- | :---: | :---: | :---: | :---: |
| Adjunct | 9 | $126,042 \pm 32,998$ | 133,000 | $(84,000,174,450)$ |
| Clinical X | 7 | $183,758 \pm 33,734$ | 177,000 | $(145,300,250,000)$ |
| HS Clinical | 29 | $177,093 \pm 64,474$ | 162,200 | $(84,000,300,000)$ |
| In Residence | 3 | $170,567 \pm 33,697$ | 165,000 | $(140,000,206,700)$ |
| Ladder Rank | 34 | $212,103 \pm 74,817$ | 194,500 | $(119,300,420,000)$ |

Table A2: $X+Y$ salary by rank for the SOD

| Series | n | Mean $\pm$ SD | Median | $(\min , \max )$ |
| :--- | :---: | :---: | :---: | :---: |
| Assistant | 21 | $154,982 \pm 62,359$ | 140,000 | $(84,000,275,000)$ |
| Associate | 18 | $145,010 \pm 29,740$ | 144,420 | $(100,900,195,450)$ |
| Full | 43 | $218,948 \pm 66,826$ | 206,700 | $(133,000,420,000)$ |

Table A3: $\mathrm{X}+\mathrm{Y}$ salary by department for the SOD

| Series | n | Mean $\pm$ SD | Median | $(\mathrm{min}, \mathrm{max})$ |
| :--- | :---: | :---: | :---: | :---: |
| CTB | 14 | $180,010 \pm 49,904$ | 162,955 | $(119,300,267,400)$ |
| OMFS | 9 | $242,033 \pm 63,420$ | 250,000 | $(135,000,323,300)$ |
| OFS | 25 | $201,580 \pm 74,076$ | 188,603 | $(95,000,420,000)$ |
| PRDS | 34 | $162,989 \pm 62,381$ | 153,900 | $(84,000,307,300)$ |

Table A4: Number of merits or promotion between 2014 and 2017 by department for the SOD

| Series | n | 0 | 1 | 2 |
| :--- | :---: | :---: | :---: | :---: |
| CTB | 14 | $3(21.43 \%)$ | $5(35.71 \%)$ | $6(42.86 \%)$ |
| OMFS | 9 | $2(22.22 \%)$ | $5(55.56 \%)$ | $2(22.22 \%)$ |
| OFS | 25 | $10(40.00 \%)$ | $14(52.00 \%)$ | $2(8.00 \%)$ |
| PRDS | 34 | $8(23.53 \%)$ | $10(29.41 \%)$ | $16(47.06 \%)$ |

# Faculty Salary Equity Study <br> School of Medicine <br> April 2018 

In October 2017 Vice Provost Brian Alldredge distributed the results of the UCSF Faculty Salary Equity Review for FY18. The School of Medicine's Analytic Team (Vice Dean Elena Fuentes-Afflick, Vice Dean Maye Chrisman, and Professor Nancy Hessol from the School of Pharmacy) analyzed the data and distributed the departmental data in October 2017.

The information in this report is a summary of the School of Medicine's school-wide analysis, a summary of results from a similar set of analyses undertaken at the department level and more detailed analysis conducted by those departments where a difference by gender and/or URM status was documented. In addition, using a predictive-salary model provided by the Vice Provost's Office, this report includes a narrative summary of individual faculty whose compensation was higher than predicted, and a matched-pair analysis to understand compensation of individual faculty that was lower than predicted.

## OVERALL SCHOOL OF MEDICINE ANALYSIS

X+Y compensation (FY18) -- The results for the School of Medicine demonstrated that female faculty members at Assistant and Associate ranks received $X+Y$ compensation that was $4-8 \%$ lower than their male counterparts. Specifically, the analysis of $X+Y$ compensation for female faculty members, by rank, revealed:

- Assistant Professors: 4\% lower than males;
- Associate Professors: 8\% lower than males

There was no difference in $\mathrm{X}+\mathrm{Y}$ compensation related to URM status at any rank.
Z payment (FY17) -- There were no gender- or URM-based differences in the likelihood of receiving a Z payment (clinical incentive payment).

However, among faculty who received a Z payment in FY17, the median annual amount received by female faculty members was $26-35 \%$ less than the median annual amount received by male faculty members:

- Assistant Professors: females received 26\% less than their male counterparts;
- Associate Professors: females received 35\% less than their male counterparts;
- Professors: females received $26 \%$ less than their male counterparts

To understand faculty salary equity issues within the School of Medicine, it is important to know that each department has a different compensation plan. Thus, faculty are paid on different scales and departments employ varying approaches to setting compensation. Some departments use clinical incentive payments as a significantly larger component of annual compensation than others, due to differences in the nature of their clinical work. Finally, market-competitive compensation varies widely for different specialties. For those reasons, department-specific analysis of compensation is critical to identify and address salary equity issues.

Within the School of Medicine, there are 28 compensation plans and the range of salary scales is from 0 to 7. The departments vary in their approaches to setting salary; for example, some departments emphasize raising salaries for junior faculty members. Many departments adjust compensation based on the available sources of funding for the faculty member's salary.

The competitive salary rates for School of Medicine physician faculty members also vary by specialty. The figure below presents data published by the Association of American Medical Colleges (AAMC) regarding the compensation ranges for physicians, based on academic rank, illustrating how median salaries for different subspecialties can vary dramatically for MDs.

## AAMC 2016-2017 Faculty Salary Benchmarks <br> Median Total Compensation <br> All Schools by Rank: MDs



The following figure presents AAMC data regarding the compensation ranges for PhD faculty members, based on academic rank. As with compensation for physicians, the median compensation for PhD faculty varies by department, though the range is much narrower.

## AAMC 2016-2017 Faculty Salary Benchmarks <br> Median Total Compensation <br> All Schools by Rank: PhDs



Female UCSF SOM faculty are overrepresented in the specialties that have lower salary benchmarks (defined as AAMC median total compensation for all medical schools). Nearly half (46\%) of the School of Medicine's faculty are female, but women represent $56 \%$ of faculty in the lower-paid specialties and $37 \%$ of faculty in the higher-paid specialties.


The way in which departments utilize incentive payments also varies. The figure below presents a rank-ordered summary of the proportion of $\mathrm{X}+\mathrm{Y}$ compensation that is distributed as BYZ payments.


Female UCSF SOM faculty are underrepresented in the departments that pay high clinical incentives ( $15 \%$ or more of $\mathrm{X}+\mathrm{Y}$ salary).

For the School of Medicine, the Faculty Salary Equity Study continues to be an effective means of analyzing compensation issues and identifying areas of concern. Departmental leaders were actively engaged in the review process and committed to the goal of identifying and addressing imbalances. The Dean's Office encouraged all departments to be transparent about compensation practices and will continue to support departmental leaders in our collective efforts to promote equity across gender and URM groups.

## DEPARTMENTAL ANALYSES

The School's Analytic Team conducted a set of analyses for each department that mirrored the school-wide analyses. The Chair and Manager were asked to review the findings, encouraged to conduct additional analyses, and to propose solutions in case of a gender- or URM-based difference. During October-November, Vice Deans Chrisman and Fuentes-Afflick hosted four workshops for chairs, directors, and managers to review the analyses and answer questions; nearly all departments (24 of 25) participated in the workshop discussions.

- Overall, we identified statistically significant differences in FY18 X+Y compensation according to gender or URM status within seven departments.
- We did not identify statistically significant differences in the likelihood of receiving a Z payment in FY17 according to gender or URM status in any department.
- Among faculty who received a Z payment in FY17, there were statistically significant gender-based differences in two departments and statistically significant URM-based differences in two departments.
- Each department provided a thoughtful analysis of their FSER results and emphasized their commitment to ongoing review in order to minimize the risk of gender- or URM-based differences in compensation.
- Each department's findings and analysis have been or will be shared broadly with their constituents.

Please note: For the purpose of this analysis, the five laboratory-based basic science departments (Anatomy, Biochemistry and Biophysics, Cellular and Molecular Pharmacology, Microbiology and Immunology, Physiology) were analyzed as a single group. Bioengineering and Therapeutic Sciences, a joint department of the Schools of Medicine and Pharmacy, is reported separately by the School of Pharmacy.

One key difference between the school-wide analysis and the department-level analyses conducted by the School's Analytic Team is that the department-level analyses did not control for step within rank, due to small sample sizes within departments. Additional analyses described below conducted by several departments adjusted for both rank and step in order to reflect their compensationsetting practices.

This summary report details the responses from the five basic science departments (analyzed as one group) and eight clinical departments that demonstrated a significant difference. The FSER committee reviewed detailed analyses for each department; a summary version of the analyses is presented in this report.

## Anesthesia

## FINDING

In the Department of Anesthesia, female faculty members received $\mathrm{X}+\mathrm{Y}$ compensation that was $5 \%$ lower than their male counterparts.

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENT

The department uses two salary scales, one for clinically-active faculty and one for non-clinical (research) faculty, where $X+Y$ is set based on rank and step. For clinically-active faculty, the department sets a standard expectation for clinical workload based on effort. If a faculty member's clinical workload is reduced due to other funded activities (e.g., extramural research), the $\mathrm{X}+\mathrm{Y}$ compensation remains at the salary scale. Faculty members may also request to reduce their clinical workload for other reasons; in those cases, Y compensation is reduced proportionately. Research faculty (with research doctorates) are assigned to a different academic programmatic unit (APU) which is at a lower salary scale than clinically active faculty, so their X compensation is lower. Within the group of research faculty, there is further differentiation and faculty members in Senate series (ladder rank and in-residence) are also paid a Y based on the salary scale.

OUTCOME
The department has 133 faculty members, 128 of whom have clinical doctorates or clinical \& research doctorates and five of whom have research doctorates. Of the 128 clinically active faculty, 111 are paid at the published $\mathrm{X}+\mathrm{Y}$ compensation rate, based on rank and step.

- 12 faculty members have lower Y pay than the published rates due to reduced clinical workloads requested by the faculty members. Seven are female and five are male.
- Five faculty members have higher Y pay than the published rates due to senior leadership positions in the department and/or the school (department chair, ZSFG chief, former department chair, and two vice deans). One is female and four are male.

Of the five faculty members with research doctorates, three are female and two are male. Their X+Y compensation is set based on rank and step. Of the five, two (one male, one female) receive no Y because they are in the adjunct series.

## Dean's Office Decision:

We accept the department's analysis and agree that there is no systematic difference based on gender; the limited variability in $X+Y$ compensation is due to individual faculty members' decisions to reduce clinical effort and/or significant leadership roles held by faculty.

No further action is required.

## Basic Science

## FINDING

In the Departments of Anatomy, Biochemistry and Biophysics, Cellular and Molecular Pharmacology, Microbiology and Immunology, and Physiology, female faculty members received X+Y compensation that was $12 \%$ lower than their male colleagues.

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENTS

The departments described their salary-setting practices and then undertook a detailed review of their faculty by department, rank and step.

In general, the departments differentiate compensation between faculty in the ladder rank and inresidence series (focus on research and education) and adjunct series (primarily education). Ladder rank and in-residence faculty members receive higher compensation to reflect the broader scope of their roles. Each department sets target $\mathrm{X}+\mathrm{Y}$ compensation for their faculty as a multiplier of X . The multipliers differ by department and by rank. Variability in actual $\mathrm{X}+\mathrm{Y}$ compensation is driven largely by availability of funding (primarily extramural research funding), equity with ORUs for jointly-recruited recruitments, and equity with clinical departments for jointly-recruited basic science faculty who have clinical duties. In addition, individual faculty members are allowed to lower their compensation in order to preserve research funding for other purposes such as general laboratory expenses.

The departments reviewed average $X+Y$ compensation within each department according to rank and step in order to assess variability in $\mathrm{X}+\mathrm{Y}$ compensation.

## OUTCOME

The departments identified differences in $\mathrm{X}+\mathrm{Y}$ at the assistant and associate professor ranks. At Assistant rank, the average $\mathrm{X}+\mathrm{Y}$ compensation for male faculty members was higher than for females, while the average $\mathrm{X}+\mathrm{Y}$ compensation was higher for female faculty at Associate rank, relative to males. Differences in compensation for individuals were explained by the factors described above. There was no evidence of systematic differences by gender at Assistant and Associate ranks.

The departments noted that the largest gender-based difference in compensation was at Professor rank. The average $\mathrm{X}+\mathrm{Y}$ compensation for males was $\$ 261,263$, as compared to $\$ 190,002$ for females across the five departments.

The difference in full professor $\mathrm{X}+\mathrm{Y}$ is primarily driven by seniority, given the emphasis on rank and step in setting target salaries. Among ten female Professors in basic science departments, only two (20\%) are at step 6 or above; in fact, both are at step 6. In contrast, among 36 male Professors in basic science departments, nineteen are at step 6 or above (53\%), and 15 are at above scale rank. Three of the most senior male faculty members hold or previously held senior leadership roles.

After accounting for rank, step, availability of funding, and equity with ORUs and clinical departments for jointly-recruited recruitments, there was no evidence of a systematic difference in $\mathrm{X}+\mathrm{Y}$ compensation by gender in the basic science departments.

Dean's Office Decision: We accept the departments' analyses. No further action is required.

## Epidemiology and Biostatistics

## FINDINGS

In the Department of Epidemiology and Biostatistics, female faculty members received $\mathrm{X}+\mathrm{Y}$ compensation that was $14 \%$ lower than male faculty members.

URM faculty in the department received $\mathrm{X}+\mathrm{Y}$ compensation that was $68 \%$ higher than non-URM faculty members.

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENT

The department undertook additional analyses based on the following information:

1) The department's compensation plan explicitly benefits faculty with a clinical or combined clinical and research degrees. The additional analyses adjusted for PhD degree versus a clinical or combined (MD/PhD) degree; and
2) The department has a seniority imbalance between women and men and adjusted for step within rank; and
3) Two faculty members, whose duties reside outside the department and whose salary is set outside the department, were removed from the dataset. This exclusion was made after the Dean's Office was consulted and concurred with the department's request.

## OUTCOME - GENDER

The department's additional analyses of $\mathrm{X}+\mathrm{Y}$ compensation demonstrated that the coefficient for gender was $5 \%$ less with a $95 \%$ confidence interval from $11 \%$ less to $2 \%$ more, which was not statistically significant ( $P=0.14$ ).

OUTCOME - URM STATUS
The department's additional analyses of $\mathrm{X}+\mathrm{Y}$ compensation demonstrated that the odds ratio for URM faculty changed from 1.68 (Dean's Office analysis) to 1.67 (departmental analysis). The department noted that it has a single URM faculty member, whose compensation is largely driven by the senior department leadership role held by that individual.

Dean's Office Decision:
We accept the department's analysis of the revised dataset, which included adjusting for type of degree and academic rank/step. We accept their finding that the revised analyses demonstrated that there was no longer a gender-based difference in $X+Y$ compensation after the additional variables were added to the model.

We accept the department's explanation that the URM-based difference in X+Y compensation was based on the compensation of a single URM faculty member in the department. No further action is required.

## Family and Community Medicine

## FINDING

Among faculty members in the Department of Family and Community Medicine who received a Z payment for clinical incentives, URM faculty members received an amount that was $89 \%$ lower than nonURM faculty members (odds ratio 0.11).

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENT

The department leaders reviewed the results with the faculty. The following information was shared with the faculty and the Dean's Office:

- Z payments are a low proportion of total compensation in FCM (the amount of Z paid is approximately $1 \%$ of $\mathrm{X}+\mathrm{Y}$ compensation for the department as a whole).The difference in the amount of Z payment is largely accounted for by the different approach to Z payments for clinically active faculty based at UCSF Health and ZSFG.
- Due to the ZSFG funds flow structure, which generates clinical revenue for the SFDPH health system under cost-based FQHC "look alike" payment rates, the department does not use performance-based Z payments. Relatively small amounts of Z pay are used to incentivize faculty at ZSFG to attend births and assume extra inpatient shifts.
- At UCSF Health practices, FCM faculty members are eligible for performance-based Z incentive payments, consistent with an incentive plan guideline for all UCSF Health primary care practices.
- There are ethnic differences in the faculty at each site, and a smaller proportion of the FCM faculty who work at UCSF Health practices are URM relative to the faculty who work at ZSFG, which explains the finding of lower amounts of Z payments for URM faculty within the department.
- The department will continue to monitor Z payment policies to assure that these do not foster inequities in the future.

OUTCOME
The department's finding related to URM-based differences in the amount of Z payments was explained by the differential distribution of URM faculty across clinical sites (UCSF Health versus ZSFG) and the site-based differences in opportunities for incentive payments.

Dean's Office Decision:
We accept the department's response, which explained the observed differences in the amount of $Z$ payments according to URM status. No further action is required.

## Medicine

## FINDING

In the Department of Medicine female faculty members received $\mathrm{X}+\mathrm{Y}$ compensation that was $7 \%$ lower than their male counterparts.

Among faculty members who received a Z payment, female faculty members received $41 \%$ less than their male counterparts.

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENT

The department conducted additional analyses which added subspecialty designation and K award status to the dataset. After adjusting for the full set of variables, there was no longer a statistically significant difference in $\mathrm{X}+\mathrm{Y}$ compensation between women and men ( $P=0.12$ ).

Using the analytic approach, the department documented that there was no significant gender-based difference in the likelihood of receiving a Z payment ( $P=0.43$ ). However, among faculty who received a Z payment, women received total payments which were significantly lower than men ( $P<0.0001$ ).

## OUTCOME

In the comprehensive analyses undertaken by the department, there was no longer a statistically significant difference in $\mathrm{X}+\mathrm{Y}$ compensation by gender.

At the committee's request, the department analyzed Z payments for each division. Overall, threequarters of Z payments are related to additional clinical work (28\%) and incentives earned for assigned clinical duties (48\%). The department identified gender-based differences in incentive payments in the division of Cardiology. Within the division nearly all the incentive payments are made to interventional cardiologists and there are no female interventional cardiologists at Parnassus or the ZSFG. The department also documented a small gender-based difference in moonlighting pay in the Division of Hospital Medicine at the ZSFG which was not easily explained and will be investigated in the coming months. The department chair confirmed that opportunities to earn clinical incentives are gender-neutral and the amount paid for clinical duties is gender-neutral.

## Dean's Office Decision:

We endorse the department's finding that there was no longer a gender-based difference in $X+Y$ compensation after adjusting for subspecialty and K award status.

We accept the department's analysis of clinical incentive payments, which do not demonstrate a systematic gender-based difference in the opportunity to earn incentives.

No action is required at this time.
Neurosurgery

## FINDING

In the Department of Neurological Surgery, of the faculty members who received Z payments, the median amount of Z received by female faculty members was $86 \%$ lower than those received by male faculty members.

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENT

The department provided the formula used to calculate Z payments:

- Monthly clinical incentives (73\% of total Z) are calculated for each faculty member, based on clinical collections less expenses. Clinical faculty receive fixed $X+Y$ compensation during the first three years of their faculty appointment and are eligible for Z incentives at the start of their fourth year.
- Annual clinical incentives (26\% of total Z) - the department chair determines an incentive pool based on the department's financial performance. Each faculty member receives a share of the total pool which is proportional to their wRVU volume.
- Saturday clinic bonus ( $<1 \%$ of total Z) - Neuro Oncology faculty receive payments proportional to wRVU volume as compensation for staffing monthly Saturday clinics. Two faculty members participate (one male, one female).
- Research incentives ( $<1 \%$ of total Z) - faculty receive modest Z payments for academic publications. Those payments for FY17 had not been paid out at the time of this analysis.

The department noted that females comprise $14 \%$ of the faculty ( 6 of 32 ). Of the six female faculty members:

- Two have research doctorates and focus exclusively on research, so they are not eligible for clinical incentives.
- One is a surgeon who was in her third year of faculty appointment in FY17 and was therefore ineligible for clinical incentives during that year.
- One does clinical work for another department and is therefore ineligible for clinical incentives in Neurosurgery.
- One is a neuropsychologist who received a clinical incentive.
- One is a neuro-oncologist whose clinical work is non-procedural and who generates fewer wRVUs per clinical FTE than a procedural specialist.

The department facilitates equal opportunity for clinical productivity through provision of operating room time, clinical time and referral directions. Faculty members also have the option to take extra call at affiliated hospitals.

In summary, the gender-based differences in Z payments are directly proportional to clinical productivity.

## Dean's Office Decision:

We accept the department's analysis and agree that there is no evidence of a gender-based difference in compensation once the appropriate comparisons were made with respect to type of role (clinical/research) and clinical productivity. No further action is required.

## Orthopaedic Surgery

## FINDING

In the Department of Orthopaedic Surgery female faculty members received $X+Y$ compensation that was $25 \%$ lower than male faculty members.

Among faculty members who received a Z payment as a clinical incentive, the amount received by URM faculty members was $95 \%$ lower than non-URM faculty members.

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENT

The Department of Orthopaedic Surgery reviewed the FSER dataset and conducted additional analyses by adding subspecialty and wRVU data to the dataset.

The department, like many other academic departments, uses MGMA data to set salary benchmarks for subspecialties. The UCSF Funds Flow system uses the same subspecialty categories. For faculty members who are based at Parnassus or Mission Bay, the department compensates clinical activities according to the number of wRVU's generated by each faculty member; at ZSFG, clinical activities are based on the City

Contract, which accounts for subspecialty and rank. Additional compensation is available for contributions in education, research, and leadership.

## Method

The dataset was sorted based on 14 MGMA subspecialties for Orthopaedic Surgery ( 8 surgical specialties and 6 non-surgical specialties) and by compensation. The department considered whether faculty members were within their "guarantee period," which refers to the guarantee of $\mathrm{X}+\mathrm{Y}$ compensation during the first three years of faculty appointment. The median salary was determined and overlaid with the proportion of female faculty members within each subspecialty. Each year, the department benchmarks $\mathrm{X}+\mathrm{Y}$ compensation for each subspecialty against data from the MGMA, AMGA and AOC and accounts for the number of years of service as well as yearly total wRVU production within each subspecialty.

Context
Surgeons versus non-surgeons
The compensation formulas and bonus amounts differ between surgeons, who represent two-thirds of the department ( $n=38,66 \%$ ), and non-surgeons ( $n=20,34 \%$ ).

Site
The compensation formulas for salary and bonus payments are based on formulas which vary by site (Parnassus/Mission Bay versus ZSFG). For faculty members who are based at Parnassus or Mission Bay, $\mathrm{X}+\mathrm{Y}$ compensation is based on specialty, rank, and funds flow wRVU's from the previous year. In addition, each faculty member at Parnassus or Mission Bay who participates in clinical work has the opportunity to earn additional ( $Z$ ) compensation based on clinical productivity and quality measures (CGCAPS scores, closed encounter times, E-Value scores, and attendance at Grand Rounds).

For faculty members who are based at ZSFG, X+Y compensation is based on specialty and rank. At ZSFG, bonus payments are distributed evenly to faculty according to their subspecialty but not based on wRVU or other performance measures.

At all sites, the formula used to compute $\mathrm{X}+\mathrm{Y}$ compensation and clinical incentive (bonus) payments is independent of any sociodemographic characteristic. In general, $\mathrm{X}+\mathrm{Y}$ compensation is based primarily on clinical productivity and less on academic rank.

## Gender

After the dataset was sorted by subspecialty and wRVU, the $\mathrm{X}+\mathrm{Y}$ compensation was reviewed for faculty members in each subspecialty and there was no evidence of a gender-based imbalance in $\mathrm{X}+\mathrm{Y}$ compensation. The department noted that among the sixteen female faculty members who were included in the FSER dataset, slightly more than half ( $56.25 \%, n=9$ ) have surgical roles and $43.75 \%(n=7)$ have non-surgical roles. Nearly one-quarter $(22 \%, n=2)$ of the female faculty within the surgical groups are also chiefs of service for their subspecialty.

As noted in the figure below, the proportion of female faculty members is highest among the subspecialties which have the lowest compensation. For example, there are no female faculty members in the two subspecialties with the highest compensation: Hip-knee and Spine surgery.


URM
The department has three URM faculty members and all three were hired within the last three years. This temporal factor is important because all three faculty members are within their ramp-up, "guarantee period" during which their $\mathrm{X}+\mathrm{Y}$ compensation is guaranteed and they are not eligible for a clinical bonus. After the guarantee period has ended, faculty members are eligible for a clinical bonus and a simple formula is used to compute the amount, based on the number of wRVUs generated.

OUTCOME
In the comprehensive comparisons and analyses undertaken by the department, there was no evidence of a systematic difference in $\mathrm{X}+\mathrm{Y}$ compensation by gender after considering subspecialty and wRVU production. The department did not rerun the logistic regression models; instead, they conducted comparisons of subgroups of faculty.

With additional information about the department's policy of salary guarantee and eligibility for clinical incentives during the first three years of faculty appointment, there was no evidence of a URM-based difference in Z payments.

## Dean's Office Decision:

We endorse the department's finding that there was no longer a gender-based difference in $X+Y$ compensation nor a URM-based difference in the amount of $Z$ compensation after adjusting for subspecialty and wRVUs, in addition to the core variables. No further action is required.

## Pediatrics

FINDING
In the Department of Pediatrics female faculty members received $\mathrm{X}+\mathrm{Y}$ compensation that was $11 \%$ lower than male faculty members.

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENT

The department reported that the salaries of four highly-paid faculty members are set outside the departmental compensation structure because of their campus- or health system-level leadership roles. The department excluded these faculty members and added adjustments for subspecialty, K award status, and salary scale to the dataset.

## Context

The Pediatrics Compensation Plan consists of two Academic Programmatic Units (APU). Faculty members who are assigned clinical responsibilities, regardless of the level of clinical effort, are in APU B, which is compensated at Scale 4. Faculty members who do not have assigned clinical duties are in APU A, which is compensated at Scale 2.

Faculty members who received a K award from the NIH or receive support through a departmentallyfunded K award were analyzed as a separate variable.

Subspecialty: The department adjusted for the three subspecialties that have the highest annual compensation: Cardiology, Critical Care, and Neonatology. Each subspecialty was coded as a dichotomous variable.

After adjusting for subspecialty, K award status, and salary scale there was no longer a statistically significant difference in $\mathrm{X}+\mathrm{Y}$ compensation by gender ( $P=0.15$ ) or URM status ( $P=0.37$ ). Salary scale, Cardiology subspecialty, Critical Care subspecialty, and Neonatology were all highly statistically significantly associated with $X+Y$ compensation $(P<0.001)$.

OUTCOME
After adjusting for additional variables associated with compensation (salary scale, K award status, and subspecialty), there was no evidence of a gender-based difference in X+Y compensation.

## Dean's Office Decision:

We accept the department's analysis and agree that there is no evidence of a gender-based imbalance in $X+Y$ compensation once the appropriate variables were analyzed. No further action is required.

## Surgery

FINDING
In the Department of Surgery, female faculty members received X+Y compensation that was 19\% lower than their male counterparts.

## ADDITIONAL ANALYSES PROVIDED BY DEPARTMENT

The department analyzed their faculty data, grouped by characteristics that influence salary rates, including surgical subspecialty, productivity, rank, and site. They did not rerun the logistic regression models.

As a clinical department, clinical activities represent the single most significant source of income, which drives compensation. Two primary factors that determine $\mathrm{X}+\mathrm{Y}$ compensation are:

- Surgical subspecialty, to be competitive with the market. Based on AAMC benchmarks for fixed/contractual salary, the median compensation for surgical subspecialties varies by as much as $25-40 \%$, with thoracic and cardiovascular surgery, pediatric surgery and transplant surgery as the most remunerative.
- Productivity, as measured by work RVUs. Because the clinical funds flow model is largely based on wRVU volume, higher productivity supports higher compensation.
- Availability of other funding, including extramural funds and philanthropy, also affect compensation.

In addition, there are differences in compensation setting for two specific groups:

- East Bay faculty. Funding for the clinical faculty based in the East Bay is contract-based (rather than driven by wRVU volume). Differences in X + Y compensation, as compared to other faculty, are offset by Z payments for call coverage.
- Tissue-typing lab leadership. These specialized roles are held by two male faculty members who have research doctorates. While there are no published benchmarks for compensation, their compensation is set relative to those who hold similar roles at peer institutions.


## OUTCOME

The department noted that there are disproportionately more male faculty members in the surgical subspecialties with higher remuneration, as shown in the figure below:


The department reviewed its faculty's mean X+Y compensation and mean wRVU volume by rank and subspecialty. Those comparisons demonstrated that differences in compensation were highly correlated to differences in clinical productivity and were not related to gender. Overall, across all ranks and subspecialties, median wRVU productivity for female faculty was $73 \%$ that of the median wRVU productivity for male faculty, and median X+Y compensation for female faculty was $79 \%$ of the median $\mathrm{X}+\mathrm{Y}$ compensation for male faculty. These ratios varied by rank and subspecialty and did not demonstrate a systematic difference by gender.

Within the department of Surgery, the division chiefs meet with faculty members every year to review their clinical activity, productivity, and ensure equitable access to patient care activities such as clinic time, call schedule and operating room time.

## Dean's Office Decision:

We accept the department's analysis and agree that the evidence supports that once appropriate comparisons are made with respect to subspecialty and clinical productivity, there is no evidence of systematic gender-based differences in $X+Y$ compensation. No further action is required.

## OUTLIER ANALYSIS

The Vice Provost's Office prepared an analysis to calculated "predicted salary" (X+Y) based on department, academic series, rank, step and doctorate type. In this analysis, "high salary outliers" were defined as individuals whose salaries were in the top $5 \%$, defined as $140 \%$ or more than the predicted salary ( 1.6 standard deviations) and "low salary outliers" were in the lowest $5 \%$, defined as $75 \%$ or less than the predicted salary (1.4 standard deviations). In the School of Medicine, 106 faculty members were identified as high salary outliers and 129 faculty members were identified as low salary outliers.

High salary outliers:
Department chairs and managers provided information about setting salary, whether the individual serves in a leadership capacity, and whether the leadership capacity had been assigned as the result of a search.

One quarter (27/106) of individuals identified as high outliers have their salary set outside the department, most commonly for medical center leadership roles. Nearly half of high outliers (45\%, $48 / 106$ ) were identified as having a leadership role which contributes to compensation. Half of all high outliers have their salary set within the department but do not hold a leadership role which contributes to compensation.

For faculty members who were identified as high outliers and for whom a leadership role contributes to compensation, two-thirds were reported to have been appointed through a search process. Among the group which had been searched into the leadership role, $84 \%$ were men. For the group which had not been searched into the leadership role, women represented $31 \%$ of high outliers, which was twice as high as the proportion of women who were high outliers who had been searched into the leadership role (16\%). Regarding URM status, there were only four URM faculty members who were in the high outlier group, which precludes detailed analysis.

Low salary outliers:

Department chairs and managers were asked to provide information about how salaries were set for the 129 faculty members identified as low salary outliers. 37\% were female and $9 \%$ were URM. The primary reasons for the lower-than-predicted salaries were:

- Salaries limited by funding sources (72\%) - this included faculty with clinical doctorates who has limited or no clinical duties; it also included faculty whose salary was limited by available grant support.
- Lower market-based compensation rates (9\%) - this included faculty who were in specialties where the market pay is lower than the department norm (e.g., non-procedural clinicians in surgical departments).
- The remaining cases (19\%) were explained by performance concerns, faculty who opted for higher clinical incentives $(\mathrm{Z})$ instead of higher salary $(\mathrm{X}+\mathrm{Y})$, pay not captured in this analysis (e.g., VA clinical compensation), and faculty who were on leave at the time the data were produced, so the salary rate was understated.

Based on this analysis, one department identified two faculty members who had low salaries for which there was no explanation. The department made retroactive increases to the faculty members' salaries (total salary adjustments $\$ 84,300$, effective $7 / 1 / 17$ ).

# University of California, San Francisco School of Nursing 2018 Faculty Salary Equity Review Report and Action Plan 

## Purpose

The purpose of this Faculty Salary Equity Review (FSER) analysis was to determine the presence and size of imbalance in faculty salary and accelerated academic advancement by gender and underrepresented minority (URM) status for the University of California, San Francisco (UCSF) School of Nursing (SON) during the period between July 1, 2016 and September 1, 2017.

## Methodology

Analysis of the UCSF SON data followed the guidelines and analysis plan of the UCSF FSER Committee. Data for faculty members at $75 \%$ or greater time were provided by the UCSF Office of Academic Affairs and Faculty Development and Advancement. The SON has four departments: Community Health Systems (CHS), Family Health Care Nursing (FHCN), Physiological Nursing (PN) and Social and Behavioral Sciences (SBS). Because of the small size of the SON faculty, only a school-level analysis was conducted.

Gender was coded as female or male. Race/ethnicity was recoded as URM or non-URM. Per the campus definition, URM status was representative of faculty members who identified as Black/African American, Hispanic/Latinx, American Indian/Alaska Native, Filipino or Hawaiian/Pacific Islander. Non-URM status was representative of faculty members who identified as non-Hispanic White or Asian, or declined to state.

Annual salary ( $\mathrm{X}+\mathrm{Y}$ or Z ) in dollar amount was adjusted to full-time status dividing by the percent effort of appointment and then log transformed to reduce the possible influence of extreme salary amounts and to report results in terms of percent differences in salaries. $X$ represented the base salary, $Y$ represented the negotiated compensation and $Z$ represented the incentive/bonus compensation. The presence of a $Z$ payment was coded as yes or no. The presence of an accelerated merit or promotion was coded as yes or no.

Multiple linear regression analyses were conducted to test for URM versus non-URM differences and female versus male differences in the log transformed $\mathrm{X}+\mathrm{Y}$ salary. Independent variables included in the adjusted models were (a) step, (b) rank (Assistant, Associate, or Professor), (c) degree (research doctorate, clinical doctorate, or other), (d) series (Ladder/In-Residence, Clinical X/HS Clinical, or Adjunct), and (e) department (CHS, FHCN, PN, or SBS). Coefficients from the regression analyses were back transformed to obtain a ratio interpretation. The results are reported with unadjusted estimates of the relative ratio (RR) with $95 \%$ confidence intervals (CI) and adjusted relative ratios (aRR) with $95 \% \mathrm{CI}$. Statistical significance was set at $p \leq .05$, two-tailed.

Because of the small number of male and URM faculty members, matched-pairs (individual-level) analyses were conducted for actual $X+Y$ salaries, matched on series, rank and step. A residual outlier analysis was conducted to identify the salaries of faculty members that were approximately 1.6 standard deviations or $140 \%$ above the statistical model's predicted $X+Y$ salary and 1.4 standard deviations or $75 \%$ below the statistical model's predicted $X+Y$ salary.

The presence of a $Z$ payment and the presence of an accelerated merit or promotion between men and women and between URM and non-URM groups were examined with the Chi-square test of proportions
and the Fisher Exact test. Statistical significance was set at $p \leq .05$, two-tailed. Group sample sizes were too small to warrant adjusted analyses through binomial logistic regression.

## Results

The sample was comprised of 92 faculty members with appointments greater than or equal to $75 \%$ time. Eighty-five (92.4\%) faculty members identified as female and seven (7.6\%) identified as male. Sixteen (17.4\%) faculty members were categorized as URMs and 76 ( $82.6 \%$ ) were categorized as non-URMs. Results are presented by gender and URM status for salary, Z payment, and accelerated advancement.

## Gender Status

Salary. Both the unadjusted and the adjusted (controlling for step, rank, degree, series and department) analyses did not indicate the presence of a statistically significant gender difference in Median $\mathrm{X}+\mathrm{Y}$ salary (see Table 1 below).

Table 1. Female to Male Ratio of Median $X+Y$ Salary

|  | Ratio | 95\% Confidence Interval |
| :--- | :---: | :---: |
| Unadjusted | 0.94 | $(0.78,1.13)$ |
| Fully Adjusted | 0.93 | $(0.84,1.03)$ |

The unadjusted female to male RR of median $X+Y$ salary was 0.94 ( $95 \% \mathrm{CI}: 0.78,1.13$ ). After adjustment for step, rank, degree, series and department, the female to male aRR of median $X+Y$ salary was 0.93 ( $95 \% \mathrm{Cl}$ : $0.84,1.03$ ). The salaries of female faculty members were $93 \%$ (or $7 \%$ less) that of the salaries of male faculty members; the difference was not statistically significant ( $p=.16$ ). Only step and rank were statistically significant independent variables in the multiple linear regression model. As step and rank increased, salary increased. Assistant Professors had lower salaries than Associate Professors and Associate Professors had lower salaries than Full Professors. Faculty members at higher ranks had higher salaries than faculty members at lower ranks.

The small percentage of male faculty members $(7.6 \%, n=7)$ does not provide sufficient power to detect a statistically significant difference in salaries between male and female faculty members unless the effect is large. Thus, a matched-pairs analysis by gender was conducted to determine a difference in actual $X+Y$ salary, matched on series, rank and step (see Table 2 and Figure 1 in the Appendix). Results indicated that every male faculty member, with one exception, earned a minimum of $\$ 13,000$ more in salary, due primarily to the $Y$ component, compared to his female counterpart. Salary differences ranged from $\$ 1,228$ to $\$ 60,058$. Of the seven cases, five cases were exact matches, one was not an exact match, and in another case, there was no close female match.

Z Payment. One (14.3\%) of the seven male faculty members received a Z payment. None (0.0\%) of the 85 female faculty members received a $Z$ payment. The difference between the two proportions was not statistically significant (two-tailed Fisher Exact $p=.08$ ). The lack of any female faculty member with a $Z$ payment made calculation of an odds ratio and using binomial logistic regression to calculate an adjusted odds ratio statistically inappropriate.

Accelerated Advancement. None ( $0.0 \%$ ) of the seven male faculty members had an accelerated merit or promotion. Eight (9.4\%) of the 85 female faculty members had an accelerated merit or promotion. The difference between the two proportions was not statistically significant (two-tailed

Fisher Exact $p=1.00$ ). The lack of any male faculty member having an accelerated merit or promotion made calculation of an odds ratio and using binomial logistic regression to calculate an adjusted odds ratio statistically inappropriate.

The one male faculty member who received a $Z$ payment did not have an accelerated merit or promotion. The eight female faculty members who had an accelerated merit or promotion did not receive a Z payment.

## Underrepresented Minority Status

Salary. Both the unadjusted and the adjusted (controlling for step, rank, degree, series and department) analyses did not indicate the presence of a statistically significant URM status difference in Median X+Y salary (see Table 3 below).

Table 3. URM to Non-URM Ratio of Median X+Y Salary

|  | Ratio | $95 \%$ Confidence Interval |
| :--- | :---: | :---: |
| Unadjusted | 0.93 | $(0.82,1.06)$ |
| Fully Adjusted | 0.99 | $(0.92,1.07)$ |

The unadjusted URM to non-URM RR of median $X+Y$ salary was 0.93 ( $95 \% \mathrm{Cl}$ : 0.82, 1.06). After adjustment for step, rank, degree, series and department, the URM to non-URM aRR of median $\mathrm{X}+\mathrm{Y}$ salary was 0.99 ( $95 \% \mathrm{CI}: 0.92,1.07$ ) and it was not statistically significant ( $p=.29$ ). The salaries of URM faculty members were $99 \%$ (or $0.7 \%$ less) that of the salaries of non-URM faulty members; the difference was not statistically significant ( $p=.84$ ). None of the independent variables in the multiple linear regression model were statistically significant.

The small percentage of URM faculty members ( $17.4 \%, n=16$ ) does not provide sufficient power to detect a statistically significant difference in salaries between URM and non-URM faculty members unless the effect is large. Thus, a matched-pairs analysis by URM status was conducted to determine a difference in actual $X+Y$ salary, matched on series, rank and step (see Table 4 and Figure 2 in the Appendix). Four URM faculty members were paid salaries higher than that of non-URM faculty members; the salary difference ranged from $\$ 7,921$ to $\$ 52,000$. Twelve URM faculty members were paid salaries lower than that of non-URM faculty members; the salary difference ranged from $\$ 1,228$ and $\$ 60,058$. Of the 16 cases, 11 were exact matches, two cases had no close gender matches, two cases had no exact matches, and in one case, there was no close gender match nor was there an exact match.

Z Payment. None (0.0\%) of the 16 URM faculty members received a Z payment. One (1.3\%) of the 76 non-URM faculty members received a $Z$ payment. The difference between the two proportions was not statistically significant (two-tailed Fisher Exact $p=1.00$ ). The lack of any URM faculty member with a $Z$ payment made the calculation of an odds ratio and using binomial logistic regression to calculate an adjusted odds ratio statistically inappropriate.

Accelerated Advancement. One (6.3\%) of the 16 URM faculty members had an accelerated merit or promotion. Seven (9.2\%) of the 76 non-URM faculty members had an accelerated merit or promotion. The difference between the two proportions was not statistically significant (two-tailed Fisher Exact $p=1.00$ ). The unadjusted odds ratio was 0.66 ( $95 \% \mathrm{Cl}: 0.08,5.75$ ) and it was not statistically significant ( $p=.70$ ). The adjusted odds ratio, controlling for step, rank, degree, series and department, was 5.47 ( $95 \% \mathrm{Cl}: 0.19,158.88$ ) and it was not statistically significant ( $p=.32$ ).

## Faculty Salaries Above and Below the Statistical Model's Predicted Amount

Results of a residual outlier analysis indicated that three faculty members' actual $X+Y$ salaries were $140 \%$ or about 1.6 standard deviations above the model's predicted $X+Y$ salary, and one faculty member's actual $X+Y$ salary was $75 \%$ or about 1.4 standard deviations below the model's predicted $X+Y$ salary. Among the three faculty members with higher than expected salaries, two were females and one was male; one of the female faculty members was a URM. The one faculty member with a salary below the expected rate was female and a non-URM.

## Additional Analyses

Summary descriptive statistics for unadjusted median $X+Y$ salary, presence of $Z, Z$ payment, and presence of acceleration in rank, degree, series and department by gender and URM status are presented in Table 5 in the Appendix.

## Limitations of the Analysis

The relatively small total sample size of the SON faculty ( $n=92$ ) and the small percentage of male ( $7.6 \%$, $n=7)$ and URM $(17.4 \%, n=16)$ faculty members do not provide sufficient power to detect a statistically significant ( $p \leq .05$ ) difference between male and female faculty members or between URM and nonURM faculty members unless the effects were relatively large. The analysis included only faculty members at $75 \%$ or greater time. For the matched-pairs analysis, not every case was an exact match on series, rank and step.

## Discussion

## Gender Status

There is a lack of statistical evidence of an imbalance in median $\mathrm{X}+\mathrm{Y}$ salary, presence of a Z payment, and presence of an accelerated advancement between female and male faculty members, adjusting for series, rank, step, degree and department. Although not statistically significant, there is a trend whereby the difference in adjusted median $X+Y$ salaries between male and female faculty members has increased compared to previous years (see Table 6 in the Appendix). In 2014, the adjusted median $X+Y$ salaries of female faculty members were $3 \%$ lower than their male counterparts. In 2016, the adjusted median $X+Y$ salaries of female faculty members were $4 \%$ lower than their male counterparts. In 2017, the adjusted median $X+Y$ salaries of female faculty members were $7 \%$ lower than their male counterparts. The reason for this trend of increased gender imbalance in salaries, primarily in the $Y$ component, may be a consequence of increased efforts to recruit and retain male faculty members in the SON, which also is a goal of the SON Diversity Initiative plan, implemented in 2015.

The matched-pairs analyses for male and female faculty members indicated that the actual $\mathrm{X}+\mathrm{Y}$ salaries of male faculty members were higher than their female counterparts in every case. Although the actual X-salary component was essentially the same for male and female faculty members, the actual Y -salary component for male faculty members was higher than female faculty members. In one case, the higher $Y$ salary for a male faculty member was due to a clinical incentive. In two other cases, the higher $Y$ salary for a male faculty member was due more grant funding. In the other cases, the higher salaries for male faculty members were due to recruitment and retention issues. It should be noted that of the seven cases, only five cases were exact matches based on series, rank and step.

## Underrepresented Minority Status

There is a lack of statistical evidence of an imbalance in median $X+Y$ salary, presence of a $Z$ payment, and presence of an accelerated advancement between URM and non-URM faculty members, adjusting for series, rank, step, degree and department. Although not statistically significant, there is a trend whereby the difference in adjusted median $X+Y$ salaries between URM and non-URM faculty members has decreased compared to previous years (see Table 6 in the Appendix). In 2014, the adjusted median $X+Y$ salaries of URM faculty members were 7\% lower than their non-URM counterparts. In 2016, the adjusted median $X+Y$ salaries of URM faculty members were $4 \%$ lower than their non-URM counterparts. Whereas, this year, the adjusted median $X+Y$ salaries of URM faculty members were $0.7 \%$ lower than their non-URM counterparts. These improvements in URM to non-URM salary imbalance may be a result of the SON's Diversity Initiative that was implemented in 2015.

The matched-pairs analyses, however, indicated the actual $X+Y$ salaries of non-URM faculty members were higher than their URM counterparts for $75 \%$ of the cases. Similar to female faculty members, although to a much lesser extent, URM faculty members' actual $X+Y$ salaries, primarily the $Y$ component, were lower than their non-URM counterparts. Among the 11 exact case matches, the higher $Y$-salary component for non-URM faculty members was due primarily to grant funding and clinical incentives.

## Faculty Salaries Above and Below the Statistical Model's Predicted Amount

Results of a residual outlier analysis indicated $3.3 \%(n=3)$ of the SON faculty had actual X+Y salaries higher than the expected rate, and $1.1 \%(n=1)$ of the SON faculty had an actual $\mathrm{X}+\mathrm{Y}$ salary lower than the expected rate. Among this subset of faculty, two females, one of whom was a URM, and one male had higher than expected $X+Y$ salaries. The two female faculty members were in leadership positions that resulted from a search. The male faculty member was not in a leadership position, but received a salary increase because of grant funding and retention. A non-URM, female faculty member had an actual $X+Y$ salary below the expected rate. Her salary has been corrected with a $40 \%$ increase and is now in line with the salaries of faculty members in the same series, step and rank.

## Action Plan

1. Create guiding principles for salary setting to ensure transparency, accountability, accessibility and clear communication.
2. Review and reinforce consistent implementation of the standard procedure for which $X, Y$ and $Z$ salary components are assigned based on research/scholarship, teaching/mentoring, service and administration/leadership in order to maximize salary equity.
3. Conduct a salary determination root-cause analysis, which might provide a more in-depth understanding of salary imbalance trends that were not statistically significant or apparent with matched-pairs analyses because of the relatively small size of the SON faculty and the small number of male and URM faculty members. This type of analysis may help to understand the type of work (research/scholarship, teaching/mentoring, service and administration/leadership) that is most rewarded and who, in terms of gender and URM status, does each type of work.
4. Create guidelines to remedy salary, acceleration and $Z$ payment imbalances when such imbalances exist.
5. Review and modify, as needed, the Diversity Initiative plan to reach the SON's goal, based on state and national nursing and population statistics, of $30 \%$ male and URM faculty members by 2030, with focused attention on salary equity.

## Acknowledgments

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UCSF School of Nursing 2018 Faculty Salary Equity Review Report

## Appendix

Table 2. Matched-Pairs by Gender in Actual $X+Y$ Salary on Series, Rank and Step for UCSF SON Faculty ( $\geq 75 \%$ Time)

| Case | Gender | Series | Rank | Step | X (\$) | Y (\$) | $\begin{gathered} \mathrm{X}+\mathrm{Y} \\ \text { Salary (\$) } \end{gathered}$ | Female to Male Salary Difference (\$) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Male | HS Clinical | Associate | 3 | 115,700 | 49,150 | 164,850 |  |
|  | Female A | HS Clinical | Associate | 3 | 115,700 | 0 | 115,700 |  |
|  | Female B | HS Clinical | Associate | 3 | 115,700 | 10,000 | 125,700 |  |
|  | Female Mean |  |  |  | 115,700 | 5,000 | 120,700 | -44,150 |
| 2 | Male | Adjunct | Full | 3 | 154,200 | 8,000 | 162,200 |  |
|  | Female | Adjunct | Full | 3 | 142,400 | 1,388 | 143,788 | -18,412 |
| 3 | Male | Adjunct | Assistant | 2 | 81,800 | 26,311 | 108,111 |  |
|  | Female A | Adjunct | Assistant | 2 | 81,800 | 0 | 81,800 |  |
|  | Female B | Adjunct | Assistant | 2 | 81,800 | 12,270 | 94,070 |  |
|  | Female Mean |  |  |  | 81,800 | 6,135 | 87,935 | - 20,176 |
| 4* | Male | Ladder | Associate | 4 | 132,900 | 95,146 | 228,046 |  |
|  | Female | In Residence | Associate | 4 | 122,700 | 45,288 | 167,988 | -60,058 |
| 5 | Male | Ladder | Assistant | 2 | 89,200 | 12,028 | 101,228 |  |
|  | Female | Ladder | Assistant | 2 | 81,800 | 18,200 | 100,000 | -1,228 |
| 6 | Male | In Residence | Assistant | 4 | 99,400 | 38,100 | 137,500 |  |
|  | Female A | Ladder | Assistant | 4 | 99,400 | 30,600 | 130,000 |  |
|  | Female B | Ladder | Assistant | 4 | 99,400 | 26,000 | 125,400 |  |
|  | Female C | Ladder | Assistant | 4 | 99,400 | 16,512 | 115,912 |  |
|  | Female Mean |  |  |  |  | 24,371 | 123,771 | -13,729 |
| $7{ }^{* *}$ | Male | Ladder | Associate | 5 | 143,200 | 28,401 | 171,601 |  |
|  | Female A | Ladder | Associate | 3 | 125,400 | 12,094 | 137,494 |  |
|  | Female B | Ladder | Associate | 3 | 125,400 | 13,200 | 138,600 |  |
|  | Female Mean |  |  |  | 125,400 | 12,647 | 138,047 | - 33,554 |

${ }^{*}$ Not an exact match. ${ }^{* *}$ No close female match.

Figure 1. UCSF School of Nursing Faculty at $\geq 75 \%$ Time as of September 1, 2017 Matched-Pairs Analysis by Gender in Actual X+Y Salary on Series, Rank and Step


Table 4. Matched-Pairs by URM in Actual $X+Y$ Salary on Series, Rank and Step for UCSF SON Faculty ( $\geq 75 \%$ Time)

| Case | URM Status | Series | Rank | Step | X (\$) | Y (\$) | $\begin{gathered} \mathrm{X}+\mathrm{Y} \\ \text { Salary (\$) } \\ \hline \end{gathered}$ | URM to non-URM Salary Difference (\$) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1{ }^{*}$ | URM | In Residence | Associate | 2 | 122,700 | 45,288 | 167,988 |  |
|  | Non-URM | Ladder | Associate | 2 | 132,900 | 95,146 | 228,046 | -60,058 |
| 2 | URM | Ladder | Full | 4 | 152,800 | 0 | 152,800 |  |
|  | Non-URM | Ladder | Full | 4 | 165,500 | 0 | 165,500 | -12,700 |
| 3 | URM | HS Clinical | Full | 5 | 177,800 | 0 | 177,800 |  |
|  | Non-URM A | HS Clinical | Full | 5 | 164,100 | 3,636 | 167,736 |  |
|  | Non-URM B | HS Clinical | Full | 5 | 177,800 | 0 | 177,800 |  |
|  | Non-URM C | HS Clinical | Full | 5 | 164,100 | 0 | 164,100 |  |
|  | Non-URM Mean |  |  |  | 168,667 | 1,213 | 169,879 | +7,921 |
| 4 | URM | HS Clinical | Associate | 2 | 110,100 | 15,150 | 125,250 |  |
|  | Non-URM | HS Clinical | Associate | 2 | 110,900 | 67,706 | 168,606 | -43,356 |
| 5 | URM | Ladder | Assistant | 3 | 94,000 | 23,000 | 117,000 |  |
|  | Non-URM | Ladder | Assistant | 3 | 94,000 | 61,528 | 155,528 | -38,528 |
| $6^{* *}$ | URM | Adjunct | Associate | 4 | 132,900 | 18,900 | 151,800 |  |
|  | Non-URM | Adjunct | Associate | 2 | 119,300 | 44,900 | 164,200 | -12,400 |
| 7 | URM | HS Clinical | Associate | 1 | 113,300 | 22,327 | 135,627 |  |
|  | Non-URM A | HS Clinical | Associate | 1 | 95,900 | 24,100 | 120,000 |  |
|  | Non-URM B | HS Clinical | Associate | 1 | 104,600 | 29,900 | 134,500 |  |
|  | Non-URM C | HS Clinical | Associate | 1 | 104,600 | 9,400 | 114,000 |  |
|  | Non-URM Mean |  |  |  | 101,700 | 21,133 | 122,833 | +12,794 |
| 8* | URM | Ladder | Assistant | 2 | 81,800 | 18,200 | 100,000 |  |
|  | Non-URM | Ladder | Assistant | 2 | 89,200 | 12,028 | 101,228 | -1,228 |
| 9 | URM | HS Clinical | Assistant | 2 | 81,800 | 26,200 | 108,000 |  |
|  | Non-URM A | HS Clinical | Assistant | 2 | 89,200 | 18,800 | 108,000 |  |

[^3]| Case | URM Status | Series | Rank | Step | X (\$) | Y (\$) | $\begin{gathered} \mathrm{X}+\mathrm{Y} \\ \text { Salary (\$) } \\ \hline \end{gathered}$ | URM to non-URM Salary Difference (\$) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-URM B | HS Clinical | Assistant | 2 | 81,800 | 28,200 | 110,000 |  |
|  | Non-URM C | HS Clinical | Assistant | 2 | 81,800 | 35,800 | 117,600 |  |
|  | Non-URM D | HS Clinical | Assistant | 2 | 81,800 | 29,200 | 111,000 |  |
|  | Non-URM Mean |  |  |  | 83,650 | 28,000 | 111,650 | -3,650 |
| 10 | URM | HS Clinical | Associate | 1 | 95,900 | 24,100 | 120,000 |  |
|  | Non-URM A | HS Clinical | Associate | 1 | 95,900 | 24,100 | 120,000 |  |
|  | Non-URM B | HS Clinical | Associate | 1 | 104,600 | 29,900 | 134,500 |  |
|  | Non-URM C | HS Clinical | Associate | 1 | 104,600 | 9,400 | 114,000 |  |
|  | Non-URM Mean |  |  |  | 101,700 | 21,133 | 122,833 | -2,833 |
| 11 | URM | Adjunct | Assistant | 4 | 99,400 | 67,651 | 167,051 |  |
|  | Non-URM A | Adjunct | Assistant | 4 | 99,400 | 7,064 | 106,464 |  |
|  | Non-URM B | Adjunct | Assistant | 4 | 99,400 | 23,934 | 123,334 |  |
|  | Non-URM Mean |  |  |  | 99,400 | 15,499 | 114,899 | +52,152 |
| 12 | URM | Ladder | Assistant | 4 | 99,400 | 16,512 | 115,912 |  |
|  | Non-URM A | Ladder | Assistant | 4 | 99,400 | 30,600 | 130,000 |  |
|  | Non-URM B | Ladder | Assistant | 4 | 99,400 | 26,000 | 125,400 |  |
|  | Non-URM Mean |  |  |  | 99,400 | 28,300 | 127,700 | -11,788 |
| $13^{* *}$ | URM | Ladder | Associate | 5 | 143,200 | 28,401 | 171,601 |  |
|  | Non-URM | Ladder | Associate | 4 | 132,900 | 95,146 | 228,046 | -56,445 |
| 14 | URM | Ladder | Assistant | 3 | 94,000 | 10,000 | 104,000 |  |
|  | Non-URM | Ladder | Assistant | 3 | 94,000 | 61,528 | 155,528 | -51,528 |
| 15 | URM | HS Clinical | Assistant | 2 | 89,200 | 18,800 | 108,000 |  |
|  | Non-URM A | HS Clinical | Assistant | 2 | 81,800 | 18,800 | 108,000 |  |
|  | Non-URM B | HS Clinical | Assistant | 2 | 81,800 | 28,200 | 110,000 |  |
|  | Non-URM C | HS Clinical | Assistant | 2 | 81,800 | 35,800 | 117,600 |  |
|  | Non-URM D | HS Clinical | Assistant | 2 | 81,800 | 29,200 | 111,000 |  |
|  | Non-URM Mean |  |  |  | 83,650 | 28,000 | 111,650 | -3,650 |
| ${ }^{* * *} 16$ | URM | In Residence | Assistant | 4 | 99,400 | 38,100 | 137,500 |  |
|  | Non-URM A | Ladder | Assistant | 4 | 99,400 | 30,600 | 130,000 |  |
|  | Non-URM B | Ladder | Assistant | 4 | 99,400 | 26,000 | 125,400 |  |
|  | Non-URM Mean |  |  |  | 99,400 | 28,300 | 127,000 | +10,500 |

Note. Non-URM = non-Hispanic White or Asian. URM = Underrepresented minority (Black/African American, Hispanic/Latinx, Filipino, American Indian/Alaska Native or Hawaiian/Pacific Islander).
*No close gender match. ${ }^{* *}$ Not an exact match. ${ }^{* * *}$ No close gender match; not an exact match.

Figure 2. UCSF School of Nursing Faculty at $\geq 75 \%$ Time as of September 1, 2017


Table 5. Summary Descriptive Statistics for Unadjusted Median X+Y Salary, Presence of $Z, Z$ Payment, and Presence of Acceleration in Rank, Degree, Series \& Department by URM and Gender Status for the UCSF SON Faculty ( $\geq 75 \%$ Time)

|  | Underrepresented Minority |  |  |  |  | Gender |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { URM } \\ & (n=16) \end{aligned}$ |  | $\begin{gathered} \text { Non-URM } \\ (n=76) \end{gathered}$ |  | URM/Non -URM RR | Female$(n=85)$ |  |  | Male $(n=7)$ | Female/ Male RR |
|  | $n$ |  | $n$ |  |  | $n$ |  | $n$ |  |  |
| Median X+Y Salary | 16 | \$130,439 | 76 | \$134,330 |  | 85 | \$133,000 | 7 | \$162,200 |  |
| Salary by Rank |  |  |  |  |  |  |  |  |  |  |
| Assistant | 8 | \$111,956 | 25 | \$117,600 | 0.95 | 30 | \$117,200 | 3 | \$108,111 | 1.08 |
| Associate | 6 | \$143,714 | 18 | \$130,900 | 1.10 | 21 | \$130,700 | 3 | \$171,601 | 0.76 |
| Full | 2 | \$165,300 | 33 | \$165,500 | 1.00 | 34 | \$166,618 | 1 | \$162,200 | 1.03 |
| Salary by Degree |  |  |  |  |  |  |  |  |  |  |
| Research doctorate | 9 | \$137,500 | 50 | \$133,230 | 1.03 | 53 | \$132,300 | 6 | \$149,850 | 0.88 |
| Clinical doctorate | 1 | \$151,800 | 3 | \$156,649 | 0.97 | 4 | \$154,225 | 0 | N/A | N/A |
| Other degree | 6 | \$122,625 | 23 | \$134,500 | 0.91 | 28 | \$133,000 | 1 | \$164,850 | 0.81 |
| Salary by Series |  |  |  |  |  |  |  |  |  |  |
| Adjunct | 2 | \$159,426 | 13 | \$123,334 | 1.29 | 13 | \$129,750 | 2 | \$135,155 | 0.96 |
| Clinical X/HS Clinical | 6 | \$122,625 | 33 | \$134,500 | 0.91 | 38 | \$133,000 | 1 | \$164,850 | 0.81 |
| In-Residence/Ladder | 8 | \$127,250 | 30 | \$147,064 | 0.87 | 34 | \$138.047 | 4 | \$154,550 | 0.89 |
| Salary by Department |  |  |  |  |  |  |  |  |  |  |
| Community | 3 | \$137,500 | 23 | \$129,750 | 1.06 | 24 | \$130,225 | 2 | \$151,175 | 0.86 |
| Family | 7 | \$108,000 | 22 | \$135,247 | 0.80 | 29 | \$132,300 | 0 | N/A | N/A |
| Physiological | 2 | \$120,581 | 14 | \$154,500 | 0.78 | 14 | \$153,600 | 2 | \$164,637 | 0.93 |
| Social/Behavioral | 4 | \$167,520 | 17 | \$132,300 | 1.27 | 18 | \$138,973 | 3 | \$162,200 | 0.86 |
| Presence of $Z$ | 0 | 0.0\% | 1 | 1.3\% |  | 0 | 0.0\% | 1 | 14.3\% |  |
| Z by Rank |  |  |  |  |  |  |  |  |  |  |
| Assistant | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Associate | 0 | 0.0\% | 1 | 5.6\% | N/A | 0 | 0.0\% | 1 | 33.3\% | N/A |
| Full | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Z by Degree |  |  |  |  |  |  |  |  |  |  |
| Research doctorate | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Clinical doctorate | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Other degree | 0 | 0.0\% | 1 | 4.3\% | N/A | 0 | 0.0\% | 1 | 14.3\% | N/A |
| Z by Series |  |  |  |  |  |  |  |  |  |  |
| Adjunct | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Clinical X/HS Clinical | 0 | 0.0\% | 1 | 3.0\% | N/A | 0 | 0.0\% | 1 | 100.0\% | N/A |
| In-Residence/Ladder | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Z by Department |  |  |  |  |  |  |  |  |  |  |
| Community | 0 | 0.0\% | 1 | 4.3\% | N/A | 0 | 0.0\% | 1 | 50.0\% | N/A |
| Family | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Physiological | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Social/Behavioral | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Z Payment | 0 | N/A | 1 | \$28,750 |  | 0 | N/A | 1 | \$28,750 |  |
| Z Pay by Rank |  |  |  |  |  |  |  |  |  |  |
| Assistant | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | N/A | N/A |
| Associate | 0 | 0.0\% | 1 | \$28,750 | N/A | 0 | N/A | 1 | \$28,750 | N/A |
| Full | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | N/A | N/A |
| Z Pay by Degree Research doctorate | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | N/A | N/A |


|  | Underrepresented Minority |  |  |  |  | Gender |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { URM } \\ (n=16) \end{gathered}$ |  | $\begin{gathered} \text { Non-URM } \\ (n=76) \end{gathered}$ |  | URM/Non -URM RR | $\begin{aligned} & \text { Female } \\ & (n=85) \\ & \hline \end{aligned}$ |  |  | $\begin{gathered} \text { Male } \\ (n=7) \\ \hline \end{gathered}$ | Female/ <br> Male RR |
|  | $n$ |  | $n$ |  |  | $n$ |  | $n$ |  |  |
| Clinical doctorate | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | N/A | N/A |
| Other degree | 0 | 0.0\% | 1 | \$28,750 | N/A | 0 | N/A | 1 | \$28,750 | N/A |
| Z Pay by Series |  |  |  |  |  |  |  |  |  |  |
| Adjunct | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | N/A | N/A |
| Clinical X/HS Clinical | 0 | 0.0\% | 1 | \$28,750 | N/A | 0 | N/A | 1 | \$28,750 | N/A |
| In-Residence/Ladder | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | N/A | N/A |
| Z Pay by Department |  |  |  |  |  |  |  |  |  |  |
| Community | 0 | 0.0\% | 1 | \$28,750 | N/A | 0 | N/A | 1 | \$28,750 | N/A |
| Family | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | 0 | N/A |
| Physiological | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | 0 | N/A |
| SBS/IHA | 0 | 0.0\% | 0 | N/A | N/A | 0 | N/A | 0 | 0 | N/A |
| Presence of Acceleration | 1 | 6.3\% | 7 | 9.2\% |  | 8 | 9.4\% | 0 | 0.0\% |  |
| Acceleration by Rank |  |  |  |  |  |  |  |  |  |  |
| Assistant | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Associate | 0 | 0.0\% | 1 | 5.6\% | N/A | 1 | 4.8\% | 0 | 0.0\% | N/A |
| Full | 1 | 50.0\% | 6 | 18.2\% | 2.75 | 7 | 20.6\% | 0 | 0.0\% | N/A |
| Acceleration by |  |  |  |  |  |  |  |  |  |  |
| Degree |  |  |  |  |  |  |  |  |  |  |
| Research doctorate | 0 | 0.0\% | 6 | 12.0\% | N/A | 6 | 11.3\% | 0 | 0.0\% | N/A |
| Clinical doctorate | 0 | 0.0\% | 0 | 0.0\% | N/A | 0 | 0.0\% | 0 | 0.0\% | N/A |
| Other degree | 1 | 16.7\% | 1 | 4.3\% | 4.76 | 2 | 7.1\% | 0 | 0.0\% | N/A |
| Acceleration by Series |  |  |  |  |  |  |  |  |  |  |
| Adjunct | 0 | 0.0\% | 1 | 7.7\% | N/A | 1 | 7.7\% | 0 | 0.0\% | N/A |
| Clinical X/HS Clinical | 1 | 16.7\% | 4 | 12.1\% | 1.4 | 5 | 13.2\% | 0 | 0.0\% | N/A |
| In-Residence/Ladder | 0 | 0.0\% | 2 | 6.7\% | N/A | 2 | 5.9\% | 0 | 0.0\% | N/A |
| Acceleration by |  |  |  |  |  |  |  |  |  |  |
| Department |  |  |  |  |  |  |  |  |  |  |
| Community | 0 | 0.0\% | 1 | 4.3\% | N/A | 1 | 4.2\% | 0 | 0.0\% | N/A |
| Family | 1 | 14.3\% | 3 | 13.6\% | 1.1 | 4 | 13.8\% | 0 | 0.0\% | N/A |
| Physiological | 0 | 0.0\% | 2 | 14.3\% | N/A | 2 | 14.3\% | 0 | 0.0\% | N/A |
| Social/Behavioral | 0 | 0.0\% | 1 | 5.9\% | N/A | 1 | 5.6\% | 0 | 0.0\% | N/A |

Note. N/A = Not applicable. Non-URM = non-Hispanic White or Asian. RR = Relative ratio. URM = Underrepresented minority (Black/African American, Hispanic/Latinx, Filipino, American Indian/Alaska Native or Hawaiian/Pacific Islander).

Table 6. Comparison of Gender and Underrepresented Status in $X+Y$ Salary, Presence of $Z, Z$ Payment, and Presence of Acceleration across Academic Years for the UCSF SON Faculty ( $\geq 75 \%$ Time)

| Indicator | $\begin{aligned} & \hline 2013-14 \\ & (n=75) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2015-16 \\ & (n=86) \end{aligned}$ | $\begin{aligned} & \hline 2016-17 \\ & (n=92) \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Gender Status, $n$ (\%) |  |  |  |
| Female | 65 (87) | 77 (90) | 85 (92) |
| Male | 10 (13) | 9 (11) | 7 (8) |
| URM Status, $n$ (\%) |  |  |  |
| URM | 9 (12) | 16 (19) | 16 (17) |
| Non-URM | 66 (88) | 70 (81) | 76 (83) |
| Ratio of Median X+Y Salary |  |  |  |
| Female/Male RR | 1.10 (95\% CI: 0.92, 1.31) | 1.00 (95\% CI: $0.85,1.18$ ) | 0.94 (95\% CI: $0.78,1.13$ ) |
| Female/Male aRR | 0.97 (95\% CI: 0.89, 1.05) | 0.96 (95\% CI: 0.88, 1.04) | 0.93 (95\% Cl: 0.84, 1.03) |
| URM/Non-URM RR | 0.88 (95\% CI: $0.77,1.06$ ) | 0.91 (95\% CI: 0.80, 1.04) | 0.93 (95\% CI: 0.82, 1.06) |
| URM/Non-URM aRR | 0.93 (95\% CI: 0.86, 1.01) | 0.96 (95\% CI: 0.86, 1.03) | 0.99 (95\% CI: 0.92, 1.07) |
| Actual X+Y Median Salary |  |  |  |
| Female | Unavailable | Unavailable | \$133,000 |
| Male | Unavailable | Unavailable | \$162,200 |
| URM | Unavailable | Unavailable | \$130,439 |
| Non-URM | Unavailable | Unavailable | \$134,330 |
| Presence of Z, $\boldsymbol{n}$ (\%) |  |  |  |
| Female | 11 (17) | 2 (3) | 0 (0) |
| Male | 0 (0) | 1 (11) | 1 (14) |
| URM | 1 (11) | 0 (0) | 0 (0) |
| Non-URM | 10 (15) | 3 (4) | 1 (1) |
| Ratio of Presence of $\mathbf{Z}$ |  |  |  |
| Female/Male RR | N/A | 0.21 (95\% CI: 0.02, 2.62) | N/A |
| Female/Male aRR | N/A | N/A | N/A |
| URM/Non-URM RR | 0.70 (95\% CI: $0.08,6.22$ ) | N/A | N/A |
| URM/Non-URM aRR | 1.19 (95\% CI: 0.10, 14.48) | N/A | N/A |
| Presence of Acceleration, $\boldsymbol{n}$ (\%) |  |  |  |
| Female | 11 (17) | 4 (5) | 8 (9) |
| Male | 0 (0) | 0 (0) | 0 (0) |
| URM | 2 (22) | 1 (6) | 1 (6) |
| Non-URM | 9 (14) | 3 (4) | 7 (9) |
| Ratio of Presence of Acceleration |  |  |  |
| Female/Male RR | N/A | N/A | N/A |
| Female/Male aRR | N/A | N/A | N/A |
| URM/Non-URM RR | 1.81 (95\% CI: $0.32,10.12$ ) | 1.49 (95\% Cl: 0.15, 15.32) | 0.66 (95\% CI: 0.08, 5.75) |
| URM/Non-URM aRR | 4.84 (95\% CI: $0.50,46.86$ ) | N/A | 5.47 (95\% Cl: $0.19,158.88)$ |

Note. aRR = Relative ratio (adjusted for rank, step, series, degree and department). $\mathrm{Cl}=$ Confidence interval. $N / A=$ Not applicable. Non-URM = non-Hispanic White or Asian. RR = Relative ratio (unadjusted). URM = Underrepresented minority (Black/African American, Hispanic/Latinx, Filipino, American Indian/Alaska Native or Hawaiian/Pacific Islander).

# Faculty Salary Review for the School of Pharmacy 2017 

## Background:

Chancellor Hawgood's first UCSF campus wide 2014 equity analysis of faculty salaries (http://tiny.ucsf.edu/fser) was released campus-wide on February 2, 2015.

As background, the analysis was undertaken to determine evidence of campus wide inequities in faculty salaries for underrepresented minorities (URMs) or by gender (male vs female).

In response, the School of Pharmacy has performed and conducted a gender equity analysis of School of Pharmacy faculty salaries to determine if any imbalances existed at the School or department levels in 2 consecutive years, 2015 \& 2016.

The 2015 \& 2016 SOP reports were reviewed and approved by the Campus-level Faculty Salary Equity Committee with the conclusion that no gender inequities existed (all imbalances were explained by non-discriminatory and legitimate business practices).

A School-level faculty-based committee proposed the following recommendations which have been adopted as the School's guiding principles subsequent to the faculty salary equity reviews:

- The SOP should continue an annual faculty salary analysis to highlight trends and gender comparisons based on new faculty recruits, turnover and retention pressures for existing faculty, and impact on constraints and ability to acquire extramural grant funding.
- Each Department should continue to employ transparent and well-reasoned processes for determining negotiable faculty salary components.
- The Departments should strive for effective and fair criteria for accelerations in academic advancement, considering the impact on UCSF's competitiveness and our ability to recruit and retain our outstanding faculty.


## Methods:

- The dataset of faculty salary data for the School of Pharmacy was provided by the campus Office of Academic Affairs. Inclusion criteria for the analysis was consistent with previous reports to involve all paid faculty in any of the 5 series at $75 \%$ effort or greater. It included the following data elements.

1. Annualized $X+Y$ scheduled pay for 2017-18
2. Degree classification - Clinical Doctorate, Research Doctorate, Combination Doctorate, other Degree
3. Series, Rank, Step
4. Gender and ethnicity
5. BYZ payments $7 / 1 / 16$ to $6 / 30 / 17$
6. Advancement history with merits, promotions, and accelerations

## 7. Academic Department

- The dataset was further segregated by department to provide an unadjusted analysis of salary and acceleration variables by gender. The data was tabulated by rank, series, gender, median $x+Y$ pay , median y pay, average years since doctorate, calculated female/male ratios for pay with a comparison of 2015, 2016, and 2017 pay ratios. A statistical analysis on adjusted variables was performed by the campus and the school. This included a fully adjusted regression (with steps, degree type, department, gender, URM status, rank and series) for log $X+Y$ pay at the school and department level. The campus also provided a residuals analysis and flagged individual faculty salaries ( $X+Y$ pay) that were either less than $75 \%$ or more than $140 \%$ of predicted. In addition a contingency table analysis of gender, URM status, degree classification, series, rank and step was performed by Department.
- If an imbalance of $4 \%$ or greater was detected by median pay ratios, then a matched pair analysis was conducted on the basis of rank, series, step, and department.
- The Department-level datasets with salary data were provided to each Department Chair and an explanatory response for any potential imbalances was requested.
- The URM faculty identified were profiled by series, rank, step, department, and doctorate type. An imbalance was assessed based on a comparison of co-variants. If an imbalance was identified, a clarification and justification for the negotiated salary was requested of the Department.
- The preliminary results were presented to the School of Pharmacy Compensation Plan Advisory Committee for comment.
- The Dean's Office of Academic Affairs analyzed and compared the trends between the datasets since 2015. A report was provided to the Dean with an executive summary.
- Abbreviations for Departments and School-wide are as follows: Bioengineering and Therapeutic Sciences (BTS); Clinical Pharmacy (CP); Pharmaceutical Chemistry (PC); School of Pharmacy (SOP)


## Executive Summary:

## Conclusion:

There were no statistically significant differences in $X+Y$ pay between female and male and URM faculty when adjusted for degree type, rank, step, and series. Residual and matched pair analysis supported a finding of no inequities. All gender imbalances (female- and male-preferences) at the Department-level were explained by non-discriminatory legitimate business practices. However, the School should continue to strive for consistency in salary negotiations between Departments for faculty in similar series and emphasis (clinical or research). In addition, it is recommended that all faculty be apprised of leadership opportunities at the School and Department level to optimize their academic advancement and equitable access to augmented funding via $Z$ payments.

The salary trajectories with rising ranks are distinct between clinical and research based faculty. Early career clinical pharmacy faculty receive augmented $Y$ salaries to meet marketplace professional salary levels for practicing pharmacists in which the $Y$ salary component diminishes with rising ranks as the X and X ' salary components reach parity with the market place. Research-based faculty Y salary tends to peak at the associate professor rank commensurate with their grantsmanship and tends to decline at the full professor rank.

In 2017 there was an increase in the $Y$ salary as a percent of the total salary for 2 of the Departments, BTS and CP, while there was a decline in the other Department, PC. This marked a reversal in the trend for $C P$, where there had been a decline in the $Y$ salary component since 2012, and may reflect new faculty hires at the assistant rank and an offset to shifting Y salary components to meet X and $\mathrm{X}^{\prime}$ requirements of the increased HSCP scale levels.

The determinants for Y negotiated salaries are varied for each Department and by the emphasis either on a clinical or research based series. For clinical-based series, Clinical X or HS Clinical, a new hire may command a higher $Y$ salary commensurate with a lower step in rank as a recruitment incentive. As these faculty progress in step and rank, the proportion of the $Y$ salary tends to diminish in part to accommodate the requirements in HSCP scale increases, whereas research-based faculty series, Ladder rank, In Residence, Adjunct series, have $Y$ salaries linked to their extramural grantsmanship. However, in all series, other external variables may contribute to the determination of a $Y$ salary. These have been identified by the Departments as follows: teaching, administrative and service contributions to the Department, School, and Campus; sources of funding (e.g. grants, service contracts); retention incentives; size and scope of laboratory and research program; and generation of extramural support. The Department must also ensure equity is maintained among similar faculty when adjustments are made to $Y$ salaries. Other external factors may dictate the $Y$ salary levels, including faculty being based in an ORU or having transferred from another school on campus.

Main findings at the School level:
Median X \& Y: The median X + Y pay was higher for males than females on a School-wide level. However, the median and mean $X+Y$ pay was higher for females in 2 Departments, CP and BTS. There were gender imbalances in faculty salaries for the School of Pharmacy based on a School-wide unadjusted analysis on Median X + Y pay which demonstrated a male preference at the full professor rank for the HS Clinical and In Residence series, and associate and full professor ranks in Ladder rank series. The imbalance in the HS Clinical series was attributed to a comparator of 3 senior male faculty with a Y salary component augmenting their total X \& Y salary levels based on their leadership positions and administrative responsibilities in the HS Clinical series. At the associate professor rank for the Ladder rank series, the imbalance was attributed to the level of extramural grantsmanship, scope of laboratory, activities and Departmental and campus contributions with gender comparators in the same Departments. At the full professor rank for the Ladder rank series, the male cohort was associated with a large difference in average years since doctorate and higher steps at rank. At the full professor rank for $\ln$ Residence series there was a comparator of 2 of each gender representing all 3 Departments and 1 male faculty whose Y salary was negotiated outside of the Department within an ORU. Therefore, there were no matched pairs to evaluate for inequities.

There was a female preference at the full professor rank in the adjunct series with a comparator of 1 male with 3 female faculty members. The male comparator received the same salary as his female comparator in the same Department, whereas the other 2 female faculty, receiving a higher compensation, were in a different Department. There was also a female preference at the associate professor rank in the In Residence series with small comparators (2 female faculty with 2 male comparators) and the female cohort representing 2 Departments and the male cohort were within the same Department as with one of the female faculty. The imbalance was attributed to the level of extramural grantsmanship guided by a Departmental formula for negotiated salaries with gender comparators in the same Department. All other series and ranks were closely balanced by gender with ratios at 0.99 . The trends were consistent with the previous year analysis. There were 2 faculty identified in the residual analysis as $140 \%$ above the predicted salary values. Both were female faculty, full professor rank, and in the Adjunct series. There were no male comparators for these faculty members and the adjusted regression results by rank and Department revealed that Adjunct faculty made less than Ladder rank.

Median Y: There were gender imbalances in faculty salaries for the School of Pharmacy based on a School-wide unadjusted analysis on Median Y pay which demonstrated a male preference at the assistant professor rank in the Clinical $X$ series, full professor rank in the HS Clinical series and in the In Residence series. At the assistant professor rank in the Clinical X series there was 1 male comparator with 3 female faculty. Two of the female faculty were new hires and one received a higher $Y$ negotiated salary than the male faculty member, while the other was very similar. The other female faculty member had a lower $Y$, but higher step in rank and longer tenure than the male faculty member. In the HS Clinical series, the imbalance was attributed to a comparator of 3 senior male faculty with leadership positions and administrative responsibilities. At the full professor rank in the

In Residence series, there was a comparator of 2 of each gender representing all 3 Departments and 1 male faculty whose $Y$ salary was negotiated outside of the Department within an ORU. Therefore, there were no matched pairs to evaluate for inequities.

There are female preferences at the associate and full professor ranks for the Clinical $X$ series, associate professor rank for the In Residence series, and at the associate and full professor ranks for in the Ladder rank series. At the associate rank in the Clinical $X$ series, 2 of the male faculty (out of 3 total) had the same $Y$ salary as one of the female faculty (out of 2 total). The higher $Y$ salary for 1 female faculty member in this group is attributed to a previous recruitment incentive as a more recent hire. At the full professor rank for the Clinical $X$ series, the female faculty included the Department Chair, and Vice Dean of the School whose higher $Y$ salaries reflected these additional administrative responsibilities, in conjunction with the Dean of the School. A matched pair analysis of faculty within the same step revealed that all imbalances were explained by either recruitment incentives, teaching awards, or administrative responsibilities, and by achieving equity in total pay, $X$ $+X^{\prime}+Y$. At the associate rank of the In Residence series, the imbalance was attributed to the level of extramural grantsmanship guided by a Departmental formula for negotiated salaries with gender comparators in the same Department. At the associate rank in the Ladder rank series, there were 2 comparators in the female cohort from 2 Departments, while the male cohort also came from 2 different departments in which $Y$ salaries are based on extramural grant funding. At the professor rank in the Ladder rank series, female faculty were from 3 different departments with the predominance in one Department ( 6 out of 8 in BTS) and males split between 2 Departments (PC and BTS). The male cohort is represented by several A/S faculty whose $Y$ salaries are lower commensurate with their extramural grant funding and the Median $X$ \& $Y$ was imbalanced with a male preference in this group. A matched pair analysis by step at the Department level did not reveal any inequities.

Z payments: On a School-wide level, there was a greater probability of women to receive a Z payment, which is provided exclusively for administrative stipends (Chair, Vice Dean, Associate Dean, Vice Chair, ORU stipend, and Directors of Graduate Student and PharmD Programs). Note that two Z payments were provided to faculty not subject to the School of Pharmacy Compensation plan, but via their ORU.

Accelerations: On a School-wide level there was a female preference for accelerations. In particular, this occurred among full professors in the Ladder rank series.

## Main findings at the Department level:

- The Department of Bioengineering and Therapeutic Sciences (BTS) had a male preference in unadjusted Median X+Y pay at the associate and full professor rank for the In Residence and Ladder rank series. There was 1 female and male comparator for the In Residence series and the male faculty member salary was negotiated outside of the Department by an affiliated ORU. In the Ladder rank series at associate rank there was one female faculty compared with 3 male faculty and the imbalance was attributed to the level of extramural grantsmanship,
scope of laboratory, activities and Departmental and campus contributions. At the full professor level the imbalance was explained by a higher proportion of males with more years at rank (and higher step), as well the accommodation of the salary of a single male physician in the Department. Females at the full professor rank had a higher Median Y pay based on the success of their research portfolios.
- The Department of Clinical Pharmacy (CP) had male-preference imbalances for unadjusted Median Y pay and Median X + Y pay for the full professor rank in the HS Clinical Series which was attributed to three male senior faculty in leadership positions associated with substantial administrative responsibilities. There was also a male preference in Median $Y$ pay for the assistant professor rank in the Clinical $X$ series in which there was 1 male comparator with 3 female faculty. Two of the female faculty were new hires and one received a higher $Y$ negotiated salary than the male faculty member, while the other was very similar. The other female faculty member had a lower $Y$, but higher step in rank and longer tenure than the male faculty. There was a female preference in Median $Y$ pay at the associate and full professor rank in the Clinical $X$ series. At the associate rank in the Clinical $X$ series, 2 of the male faculty (out of 3 total) had the same $Y$ salary as one of the female faculty (out of 2 total). The higher $Y$ salary for 1 female faculty member in this group is attributed to a previous recruitment incentive as a more recent hire. At the full professor rank for the Clinical $X$ series, the female faculty included the Department Chair and Vice Dean of the School whose higher Y salaries reflected these additional administrative responsibilities and in conjunction with the Dean of the School. A matched pair analysis of faculty within the same step revealed that all imbalances were explained by either recruitment incentives, teaching awards, or administrative responsibilities, and equity in total pay, $\mathrm{X}+\mathrm{X}^{\prime}+\mathrm{Y}$.
- The Department of Pharmaceutical Chemistry (PC) had male-preference imbalances for unadjusted Median $X+Y$ pay for Full and Associate Professor ranks in the Ladder rank series, and unadjusted Median $Y$ pay for associate professor rank. There was a female preference for Median Y pay at the full professor rank in the Ladder rank series and in the associate rank for the In Residence series. The differences were attributed to the ability to meet the Department's compensation goal for acquiring extramural grant-based revenue support. In addition, there is only one female comparator for the associate rank and two at the full professor rank in the Ladder rank series, and one female comparator in the In Residence series.

Results:

## ADJUSTED SCHOOL-LEVEL ANALYSIS

Note: Fully adjusted gender analysis specific for the School of Pharmacy generated by the statistician for the UCSF campus Faculty Salary Equity Committee.

Female/Male $\log \mathbf{X}+\mathbf{Y}$ Pay Ratio-SOP
Ratio Confidence Interval

Fully Adjusted
0.99
(0.892, 1.099)

Note: Fully adjusted URM analysis specific for the School of Pharmacy generated by the statistician for the UCSF campus Faculty Salary Equity Committee.

URM/non-URM $\log \mathbf{X}+\mathbf{Y}$ Pay Ratio-SOP
Ratio Confidence Interval

Fully Adjusted $\quad 1.003 \quad(0.783,1.284)$

Conclusions: There were no statically significant findings for fully adjusted regression models concerning gender and URM X plus Y pay at the School-level for 2017. Note that Z payments in the School of Pharmacy do not include clinical revenues and there was insufficient data for an analysis.

URM faculty: Two of URM faculty are in the Department of Clinical Pharmacy, in the Clin $X$ series, rank of Full Professor, and Clinical Doctor of Pharmacy, and at step 2. One faculty member serves a significant and distinctive role as the Vice Dean for the School and operates out of the Dean's Office. The negotiated $Y$ salary exceeded that of the other faculty in the Department (with the exception of the Chair). The other URM faculty Y negotiated salary exceeded the median for their rank and series.

One URM faculty is in the Department of Bioengineering and Therapeutic Sciences and is identified as a high outlier based on rank and step with all other faculty in the School. This is a full professor, step 3 and unique as the only physician and combination doctorate with clinical and research responsibilities.

Note: Adjusted regression analysis by Department generated by the statistician for the School of Pharmacy Dean's Office.

| Department of Clinical Pharmacy ( $\mathbf{N = 3 3}$ ) |
| :--- |
| Female/Male log X+Y Pay Ratio-SOP |
| Ratio $\quad$ Confidence Interval |


| Fully Adjusted 1.01 | $(0.90,1.12)$ |
| :--- | :--- | :--- |
| Department of Bioengineering \& Therapeutic Sciences ( $\mathrm{N}=20$ ) |  |
| Female/Male log X + Y Pay Ratio-SOP |  |
| Ratio |  |


| Fully Adjusted 1.00 | $(0.80,1.26)$ |
| :--- | :--- | :--- |
|  |  |
| Department of Pharmaceutical Chemistry ( $\mathbf{N}=\mathbf{2 4})$ |  |
| Female/Male log X + Y Pay Ratio-SOP |  |
| Ratio |  |

Fully Adjusted $0.88 \quad(0.72,1.09)$

Conclusions: There were no statically significant findings for fully adjusted regression models concerning gender X plus Y pay at the Department-level for 2017.

Comparison of X plus Y pay by Gender and Department
School-wide
FY 2018 scheduled X+Y Pay

|  | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :---: |
|  | $\mathbf{X + Y}$ | $\mathbf{N}$ | $\mathbf{X + Y}$ | $\mathbf{N}$ |
| Mean | $\$ 179,801$ | 34 | $\$ 199,840$ | 43 |
| Median | $\$ 169,125$ |  | $\$ 181,900$ |  |
| Std Dev | $\$ 42,906$ |  | $\$ 59,721$ |  |
| Range | $\$ 127,000-326,400$ |  | $\$ 133,000-343,548$ |  |

## Results for BTS

FY 2018 scheduled X+Y Pay

|  | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{X + Y}$ | $\mathbf{N}$ | $\mathbf{X}+\mathbf{Y}$ | $\mathbf{N}$ |
| Mean | $\$ 220,277$ | 7 | $\$ 220,249$ | 13 |
| Median | $\$ 215,000$ |  | $\$ 189,000$ |  |
| Std Dev | $\$ 59,966$ |  | $\$ 65,841$ |  |
| Range | $\$ 147,000-326,400$ |  | $\$ 147,000-343,548$ |  |

## Results for Clinical Pharmacy

FY 2018 scheduled X+Y Pay

|  | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{X + Y}$ | $\mathbf{N}$ | $\mathbf{X}+\mathbf{Y}$ | $\mathbf{N}$ |
| Mean | $\$ 169,477$ | 22 | $\$ 166,550$ | 11 |
| Median | $\$ 163,325$ |  | $\$ 152,400$ |  |
| Std Dev | $\$ 32,714$ |  | $\$ 34,305$ |  |
| Range | $\$ 127,000-267,300$ |  | $\$ 133,500-245,100$ |  |

## Results for Pharmaceutical Chemistry FY 2018 scheduled X+Y Pay

|  | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{X + Y}$ | $\mathbf{N}$ | $\mathbf{X + Y}$ | $\mathbf{N}$ |
| Mean | $\$ 168,560$ | 5 | $\$ 205,148$ | 19 |
| Median | $\$ 165,500$ |  | $\$ 178,900$ |  |
| Std Dev | $\$ 23,755$ |  | $\$ 61,404$ |  |
| Range | $\$ 143,200-205,500$ |  | $\$ 133,000-315,200$ |  |

## Box-Whisker plot for comparison of Departments for distribution of $X$ plus $Y$ pay by gender.



Outliers: Clinical Pharmacy female and male are senior faculty at professor rank and $\mathrm{A} / \mathrm{S}$ and step 9 respectively and salary reflects $X+X$ per HSCP while receiving the smallest negotiated $Y$ salaries within their series. Pharmaceutical Chemistry female faculty at professor rank step 4 and salary reflects $X+X^{\prime}$. None of these faculty were identified or flagged as high beyond predicted in the residual analysis.

## Comparison of 2016 Faculty Salaries ( $\mathrm{X}+\mathrm{Y}$ ) by gender and rank and step



Outlier is a full professor, step 3 and unique as the only physician and combination doctorate with clinical and research responsibilities.

## Comparisons and trends in negotiated Y pay

| Negotiated Y Salary by Gender, school and Department |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FEMALE |  |  |  | MALE |  |  |  |
|  | Median | Average | Minimum | Maximum | Median | Average | Minimum | Maximum |
| SOP | 23,664 | 24,696 | 0 | 75,600 | 31,700 | 31,099 | 0 | 189,348 |
| BTS | 51,700 | 47,437 | 3,700 | 75,600 | 38,750 | 45,654 | 0 | 189,348 |
| CP | 19,000 | 19,028 | 0 | 45,200 | 22,450 | 18,714 | 2,500 | 38,700 |
| PC | 0 | 17,800 | 0 | 49,000 | 34,893 | 29,076 | 0 | 49,000 |





## Department-level Results



Y Salary trend as a percent of total salary by Department


## UNADJUSTED SCHOOL-LEVEL ANALYSIS

Note: the left sided columns include data from July, 2017 and the right sided column includes comparative data from July 2015.
Table 1 Unadjusted Median Pay and Pay Ratios by Gender by Series and Rank

|  | Female |  |  |  | Male |  |  |  | $2017$ <br> Female/Male Ratio |  | 2016 <br> Female <br> / Male <br> Ratio <br> (X+Y) | 2016 <br> Female / Male Ratio <br> (Y) | 2015 <br> Female <br> / Male <br> Ratio <br> (X+Y) | 2015 <br> Female/ <br> Male <br> Ratio (Y) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series Rank | Median $X+Y$ | Median Y | N | Average <br> Years <br> Since <br> Doctorate | Median $X+Y$ | Median Y | N | Average <br> Years <br> Since <br> Doctorate | X+Y | Y |  |  |  |  |
| Adjunct |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0 |  | 0 | 0 |
| Associate |  |  | 0 |  | 135 | 3 | 1 | 23.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| Full | 168 | 13 | 3 | 29.50 | 154 |  | 1 | 28.00 | 1.09 |  | 1.00 |  | 1.00 | 0.00 |
| Clinical X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 132 | 30 | 3 | 4.00 | 134 | 32 | 1 | 6.00 | 0.99 | 0.95 | 1.01 | 0.91 | 1.07 | 0.92 |
| Associate | 147 | 27 | 2 | 14.00 | 149 | 23 | 3 | 14.33 | 0.99 | 1.18 | 1.01 | 1.29 | 0.97 | 0.76 |
| Full | 182 | 16 | 8 | 27.13 | 183 | 5 | 3 | 27.33 | 0.99 | 3.21 | 0.98 | 0.38 | 0.92 | 1.01 |
| HS Clinical |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant | 132 | 33 | 2 | 3.00 |  |  | 0 |  |  |  |  |  | 0 | 0 |
| Associate | 158 | 25 | 1 | 25.00 |  |  | 0 |  |  |  | 1.14 | 1.93 | 1.08 | 1.81 |
| Full | 159 | 10 | 2 | 21.50 | 182 | 19 | 3 | 42.00 | 0.87 | 0.52 | 0.81 | 0.06 | 0.79 | 0.14 |
| In Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  |  |  | 136 | 24 | 2 | 7.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| Associate | 163 | 37 | 2 | 17.50 | 147 | 18 | 2 | 17.00 | 1.11 | 2.07 | 0.99 | 1.05 | 0.97 | 0.88 |
| Full | 172 | 5 | 2 | 26.00 | 182 | 28 | 2 | 20.50 | 0.95 | 0.17 | 1.21 | 0.81 | 1.21 | 1.69 |
| Ladder Rank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  |  |  | 147 | 34 | 1 | 7.00 | 0 | 0 | 1.08 | 1.31 | 1.00 | 0.98 |
| Associate | 159 | 56 | 2 | 15.50 | 181 | 48 | 6 | 11.00 | 0.88 | 1.16 | 0.85 | 0 | 0.85 | 0.89 |
| Full | 210 | 46 | 8 | 26.50 | 260 | 36 | 17 | 30.00 | 0.81 | 1.28 | 0.79 | 1.17 | 0.75 | 0.73 |

## School of Pharmacy

Tables 2-11: Gender status analyses: unadjusted campus-level median salary ( $\mathrm{X}+\mathrm{Y}$ ), presence of Z (proportion), median Z payment, if present, and presence of acceleration (proportion) by gender and these values and their ratios by rank, doctorate type, and series.

Table 2. Unadjusted Presence of Z (Proportion) by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Presence of Z | N | Presence of Z | N | Presence of <br> $Z$ | N |
| Female | 0.35 | 34 | 0.33 | 39 | 0.38 | 39 |
| Male | 0.33 | 42 | 0.22 | 46 | 0.29 | 48 |

Table 3. Unadjusted Median Z Pay, if Present by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Median Z | N | Median Z | N | Median Z | N |
| Female | 8 | 12 | 4 | 13 | 5 | 15 |
| Male | 6 | 14 | 4 | 10 | 5 | 14 |

Table 4. Unadjusted Presence of Acceleration (Proportion) by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Accel | N | Accel | $\mathrm{N}^{*}$ | Accel | $\mathrm{N}^{*}$ |
| Female | 0.15 | 46 | 0.08 | 78 | 0.08 | 78 |
| Male | 0.13 | 61 | 0.08 | 92 | 0.10 | 96 |

*Note: 2015 and 2016 N represents two year's data for each faculty, thus is double the N of faculty for each analysis

Table 5. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Rank

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | 2016 Female/Male Ratio | 2015 Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Z | N | Z | N |  |  |  |
| Assistant | 0.25 | 4 | 0.25 | 4 | 1.00 | 0.00 | 0.00 |
| Associate | 0.29 | 7 | 0.08 | 12 | 3.43 | 2.67 | 2.27 |
| Full | 0.39 | 23 | 0.46 | 26 | 0.85 | 1.27 | 1.20 |

Table 6. Unadjusted Median Z and Pay Ratios, if Present, by Gender by Rank

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | $2016$ <br> Female/Male Ratio | 2015 <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Median | N | Median | N |  |  |  |
| Assistant | 3 | 1 | 25 | 1 | 0.12 | 0.00 | 0.00 |
| Associate | 8 | 2 | 4 | 1 | 1.80 | 2.89 | 3.75 |
| Full | 11 | 9 | 6 | 12 | 2.01 | 1.00 | 0.80 |

Table 7. Unadjusted Presence of Acceleration and Ratios by Gender by Rank

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | 2016 Female/Male Ratio* | 2015 Female/Male Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Accel | N | Accel | N |  |  |  |
| Assistant | 0.00 | 7 | 0.09 | 11 |  | 0.00 | 0.00 |
| Associate | 0.00 | 9 | 0.10 | 21 | 0.00 | 0.00 | 0.00 |
| Full | 0.23 | 30 | 0.17 | 29 | 1.35 | 1.36 | 0.93 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis

Table 8. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Doctorate Type

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | 2016 <br> Female/Male Ratio | 2015 <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Z | N | Z | N |  |  |  |
| None | 0.00 | 1 |  | 0 |  | 0.00 | 0.00 |
| Research | 0.33 | 15 | 0.32 | 31 | 1.03 | 1.83 | 1.68 |
| Clinical | 0.41 | 17 | 0.44 | 9 | 0.93 | 1.01 | 0.96 |
| Both | 0.00 | 1 | 0.00 | 2 |  | 0.00 | 0.00 |

Table 9. Unadjusted Median Z Pay and Pay Ratios, if Present, by Gender by Doctorate Type

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | $2016$ <br> Female/Male Ratio | $2015$ <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Median | N | Median | N |  |  |  |
| None |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Research | 11 | 5 | 19 | 10 | 0.60 | 2.00 | 0.45 |
| Clinical | 5 | 7 | 4 | 4 | 1.25 | 0.75 | 0.75 |
| Both |  | 0 |  | 0 |  | 0.00 | 0.00 |

Table 10. Unadjusted Presence of Acceleration (Proportion) and Pay Ratios by Gender by Doctorate Type

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 <br> Female/Male Ratio* | ```2015 Female/Male Ratio*``` |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Accel | N | Accel | N |  |  |  |
| None | 0.00 | 2 |  | 0 |  | 0.00 | 0.00 |
| Research | 0.25 | 20 | 0.15 | 46 | 1.64 | 1.83 | 1.57 |
| Clinical | 0.09 | 22 | 0.00 | 13 |  | 0.58 | 0.23 |
| Both | 0.00 | 2 | 0.50 | 2 | 0.00 | 0.00 | 0.00 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis
Table 11. Unadjusted Presence of Acceleration (Proportion) and Ratios by Gender by Series

|  | Female |  | Male |  | ```2017 Female/Male Ratio``` | 2016 <br> Female/Male Ratio* | 2015 <br> Female/Male Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | Accel | N | Accel | N |  |  |  |
| Adjunct | 0.00 | 5 | 0.00 | 2 |  | 0.00 | 0.00 |
| Clinical X | 0.11 | 18 | 0.00 | 10 |  | 0.69 | 0.26 |
| HS Clinical | 0.00 | 6 | 0.00 | 4 |  | 0.00 | 0.00 |
| In Residence | 0.00 | 5 | 0.13 | 8 |  | 0.00 | 0.00 |
| Ladder Rank | 0.42 | 12 | 0.19 | 37 | 2.20 | 1.89 | 1.62 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis

## UNADJUSTED DEPARTMENT-LEVEL ANALYSIS

Note that ratios less than 1 indicate a male preference and greater than indicate a female preference. Note that " 0 " indicates lack of a gender comparator.
Note that all names of faculty were redacted from the Department explanations.
BIOENGINEERING \& THERAPEUTIC SCIENCES
Table 12 (BTS). Unadjusted Median Pay ( $\mathbf{\$ 1 , 0 0 0 s}$ ) and Pay Ratios by Gender by Series and Rank

|  | Female |  |  |  | Male |  |  |  |  | Male | $2016$ <br> Female/ <br> Male <br> Ratio (X+Y) | 2016 <br> Female/ <br> Male <br> Ratio <br> (Y) | $2015$ <br> Female/ <br> Male <br> Ratio (X+Y) | 2015 <br> Female/ <br> Male <br> Ratio <br> (Y) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series Rank | Median $X+Y$ | Median Y | N | Average <br> Years <br> Since <br> Doctorate | Median $\mathbf{X}+\mathbf{Y}$ | Median Y | N | Average <br> Years <br> Since <br> Doctorate | X+Y | Y |  |  |  |  |
| Adjunct |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0 | 0 | 0 | 0 |
| Associate |  |  | 0 |  |  |  | 0 |  |  |  | 0 | 0 | 0 | 0 |
| Full |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Clinical X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Full |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| HS Clinical |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Full |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| In Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Full | 147 | 4 | 1 | 20.00 | 185 | 20 | 1 | 26.00 | 0.79 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| Ladder Rank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  | 147 | 34 | 1 | 7.00 | 0.00 | 0.00 | 1.14 | 1.44 | 1.00 | 0.91 |
| Associate | 175 | 56 | 1 | 9.00 | 182 | 63 | 3 | 9.33 | 0.96 | 0.89 | 0.84 | 0.00 | 0.00 | 0.00 |
| Full | 216 | 52 | 5 | 25.17 | 267 | 44 | 7 | 30.43 | 0.81 | 1.17 | 0.82 | 2.14 | 0.72 | 1.22 |

Faculty Salary Equity Review for the UCSF School of Pharmacy 2017
Page 19 of 30
Appendix E: SOP 2018 FSER Report and Action Plan

Tables 13-22: Gender status analyses: unadjusted campus-level median salary ( $\mathrm{X}+\mathrm{Y}$ ), presence of Z (proportion), median Z payment, if present, and presence of acceleration (proportion) by gender and these values and their ratios by rank, doctorate type, and series.

Table 13. Unadjusted Presence of Z (Proportion) by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Presence of Z | N | Presence of Z | N | Presence of <br> Z |  |
| Female | 0.57 | 7 | 0.50 | 8 | 0.63 | N |
| Male | 0.25 | 12 | 0.14 | 14 | 0.13 | 8 |

Table 14. Unadjusted Median Z Pay, if Present by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Median Z | N | Median Z | N | Median Z |  |
| Female | 16 | 4 | 13 | 4 | 15 | 5 |
| Male | 19 | 3 | 11 | 2 | 19 | 5 |

Table 15. Unadjusted Presence of Acceleration (Proportion) by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Accel | N | Accel | $\mathrm{N}^{*}$ | Accel | $\mathrm{N}^{*}$ |
| Female | 0.56 | 9 | 0.31 | 16 | 0.31 | 16 |
| Male | 0.21 | 19 | 0.14 | 28 | 0.17 | 30 |

*Note: 2015 and 2016 N represents two year's data for each faculty, thus is double the N of faculty for each analysis

Table 16. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Rank

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | 2016 Female/Male Ratio | $\begin{gathered} 2015 \\ \text { Female/Male } \\ \text { Ratio } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Z | N | Z | N |  |  |  |
| Assistant | 0.00 | 0 | 0.00 | 1 |  | 0.00 | 0.00 |
| Associate | 0.00 | 1 | 0.33 | 3 | 0.00 | 0.00 | 0.00 |
| Full | 0.67 | 6 | 0.25 | 8 | 2.67 | 4.57 | 2.86 |

Faculty Salary Equity Review for the UCSF School of Pharmacy 2017

Table 17. Unadjusted Median Z and Pay Ratios, if Present, by Gender by Rank

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 Female/Male Ratio | $\begin{gathered} 2015 \\ \text { Female/Male } \\ \text { Ratio } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Median | N | Median | N |  |  |  |
| Assistant |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Associate |  | 0 | 4 | 1 | 0.00 | 0.00 | 0.00 |
| Full | 16 | 4 | 19 | 2 | 0.83 | 0.66 | 0.79 |

Table 18. Unadjusted Presence of Acceleration and Ratios by Gender by Rank

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 Female/Male Ratio | 2015 <br> Female/Male <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Accel | N | Accel | N |  |  |  |
| Assistant | 0.00 | 1 | 0.20 | 5 | 0.00 | 0.00 | 0.00 |
| Associate | 0.00 | 1 | 0.17 | 6 | 0.00 | 0.00 | 0.00 |
| Full | 0.71 | 7 | 0.25 | 8 | 2.86 | 2.68 | 2.86 |

*Note: N represents two year's data for each faculty, thus is double the N of faculty for each analysis
Table 19. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Doctorate Type

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 Female/Male Ratio | $2015$ <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Z | N | Z | N |  |  |  |
| None | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| Research | 0.57 | 7 | 0.27 | 11 | 2.10 | 3.25 | 4.38 |
| Clinical | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| Both | 0.00 | 0 | 0.00 | 1 |  | 0.00 | 0.00 |

Table 20. Unadjusted Median Z Pay and Pay Ratios, if Present, by Gender by Doctorate Type

|  | Female |  | Male |  | 2017 Female/Male <br> Ratio | 2016 Female/MaleRatio | $\begin{gathered} 2015 \\ \text { Female/Male } \\ \text { Ratio } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Median | N | Median | N |  |  |  |
| None |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Research | 16 | 4 | 19 | 3 | 0.83 | 1.16 | 0.79 |
| Clinical |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Both |  | 0 |  | 0 |  | 0.00 | 0.00 |

Table 21. Unadjusted Presence of Acceleration (Proportion) and Pay Ratios by Gender by Doctorate Type

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | 2016 Female/Male Ratio* | 2015 Female/Male Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Accel | N | Accel | N |  |  |  |
| None | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| Research | 0.56 | 9 | 0.17 | 18 | 3.33 | 2.71 | 2.19 |
| Clinical | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| Both | 0.00 | 0 | 1.00 | 1 | 0.00 | 0.00 | 0.00 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis

Table 22. Unadjusted Presence of Acceleration (Proportion) and Ratios by Gender by Series

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 <br> Female/Male Ratio* | 2015 <br> Female/Male Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | Accel | N | Accel | N |  |  |  |
| Adjunct | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| Clinical X | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| HS Clinical | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| In Residence | 0.00 | 1 | 0.00 | 1 |  | 0.00 | 0.00 |
| Ladder Rank | 0.63 | 8 | 0.22 | 18 | 2.81 | 2.14 | 1.71 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis

## DEPARTMENT OF CLINICAL PHARMACY (CP)

Table 23 (CP). Unadjusted Median Pay (\$1,000s) and Pay Ratios by Gender by Series and Rank

|  | Female |  |  |  | Male |  |  |  | 20 <br> Femal Ra | Male <br> 0 | 2016 <br> Female/ <br> Male <br> Ratio <br> (X+Y) | 2016 <br> Female/ <br> Male <br> Ratio <br> (Y) | $2015$ <br> Female/ Male Ratio (X+Y) | $2015$ <br> Female/ <br> Male <br> Ratio <br> (Y) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series Rank | Median $X+Y$ | Median Y | N | Average Years Since Doctorate | Median $X+Y$ | Median Y | N | Average Years Since Doctorate | X+Y | Y |  |  |  |  |
| Adjunct |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0 | 0 | 0 | 0 |
| Associate |  |  | 0 |  | 135 | 3 | 1 | 23.00 | 0.00 | 0.00 | 0 | 0 | 0 | 0 |
| Full | 179 | 13 | 2 | 28.00 |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Clinical X |  |  |  |  |  |  |  |  |  |  | 0.00 | 0.00 | 0 | 0 |
| Assistant | 132 | 30 | 3 | 4.00 | 134 | 32 | 1 | 6.00 | 0.99 | 0.95 | 1.01 | 0.91 | 1.07 | 0.92 |
| Associate | 147 | 27 | 2 | 14.00 | 149 | 23 | 3 | 14.33 | 0.99 | 1.18 | 1.01 | 1.29 | 0.97 | 0.76 |
| Full | 182 | 16 | 8 | 27.13 | 183 | 5 | 3 | 27.33 | 0.99 | 3.21 | 0.98 | 0.38 | 0.92 | 1.01 |
| HS Clinical |  |  |  |  |  |  |  |  |  |  | 0.00 | 0.00 | 0 | 0 |
| Assistant | 132 | 33 | 2 | 3.00 |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate | 158 | 25 | 1 | 25.00 |  |  | 0 |  |  |  | 1.14 | 1.93 | 1.08 | 1.81 |
| Full | 159 | 10 | 2 | 21.50 | 182 | 19 | 3 | 42.00 | 0.87 | 0.52 | 0.81 | 0.06 | 0.79 | 0.14 |
| In Residence |  |  |  |  |  |  |  |  |  |  | 0.00 | 0.00 | 0 | 0 |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate | 151 | 26 | 1 | 15.00 |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Full | 197 | 6 | 1 | 32.00 |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Ladder Rank |  |  |  |  |  |  |  |  |  |  | 0.00 | 0.00 | 0 | 0 |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Full | 197 | 6 | 1 | 26.00 |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |

Tables 24-33: Gender status analyses: unadjusted campus-level median salary ( $X+Y$ ), presence of $Z$ (proportion), median $Z$ payment, if present, and presence of acceleration (proportion) by gender and these values and their ratios by rank, doctorate type, and series.

Table 24. Unadjusted Presence of Z (Proportion) by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Presence of Z | N | Presence of Z | N | Presence of Z | N |
| Female | 0.32 | 22 | 0.31 | 26 | 0.31 | 26 |
| Male | 0.18 | 11 | 0.31 | 13 | 0.36 | 14 |

Table 25. Unadjusted Median Z Pay, if Present by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Median Z | N | Median Z | N | Median Z | N |
| Female | 5 | 7 | 3 | 8 | 4 | 8 |
| Male | 2 | 4 | 4 | 4 | 4 | 5 |

Table 26. Unadjusted Presence of Acceleration (Proportion) by Gender Status

|  | July 2017 |  | July 2016 |  | $N^{*}$ | Accel |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Accel | N | Accel | $\mathrm{N}^{*}$ | N |  |
| Female | 0.06 | 32 | 0.02 | 52 | 0.02 | 52 |
| Male | 0.00 | 15 | 0.04 | 26 | 0.11 | 28 |

*Note: 2015 and 2016 N represents two year's data for each faculty, thus is double the N of faculty for each analysis

Table 27. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Rank

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 <br> Female/Male Ratio | $2015$ <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Z | N | Z | N |  |  |  |
| Assistant | 0.25 | 4 | 0.00 | 1 |  | 0.00 | 0.00 |
| Associate | 0.25 | 4 | 0.00 | 4 |  | 1.25 | 1.67 |
| Full | 0.36 | 14 | 0.67 | 6 | 0.54 | 0.96 | 0.82 |

Table 28. Unadjusted Median Z and Pay Ratios, if Present, by Gender by Rank

|  | Female |  | Male |  | ```2017 Female/Male Ratio``` | 2016 Female/Male Ratio | 2015 <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Median | N | Median | N |  |  |  |
| Assistant | 3 | 1 |  | 0 |  | 0.00 | 0.00 |
| Associate | 5 | 1 |  | 0 |  | 1.50 | 1.50 |
| Full | 6 | 5 | 3 | 4 | 1.64 | 1.00 | 1.00 |

Table 29. Unadjusted Presence of Acceleration and Ratios by Gender by Rank

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 <br> Female/Male Ratio | 2015 <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Accel | N | Accel | N |  |  |  |
| Assistant | 0.00 | 6 | 0.00 | 1 |  | 0.00 | 0.00 |
| Associate | 0.00 | 6 | 0.00 | 6 |  | 0.00 | 0.00 |
| Full | 0.10 | 20 | 0.00 | 8 |  | 0.41 | 0.16 |

*Note: N represents two year's data for each faculty, thus is double the N of faculty for each analysis

Table 30. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Doctorate Type

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | 2016 <br> Female/Male <br> Ratio | 2015 <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Z | N | Z | N |  |  |  |
| None | 0.00 | 1 | 0.00 | 0 |  | 0.00 | 0.00 |
| Research | 0.00 | 3 | 0.00 | 1 |  | 0.00 | 0.00 |
| Clinical | 0.41 | 17 | 0.44 | 9 | 0.93 | 1.01 | 0.96 |
| Both | 0.00 | 1 | 0.00 | 1 |  | 0.00 | 0.00 |

Faculty Salary Equity Review for the UCSF School of Pharmacy 2017

Table 31. Unadjusted Median Z Pay and Pay Ratios, if Present, by Gender by Doctorate Type

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 <br> Female/Male Ratio | 2015 Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Median | N | Median | N |  |  |  |
| None |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Research |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Clinical | 5 | 7 | 4 | 4 | 1.25 | 0.75 | 0.75 |
| Both |  | 0 |  | 0 |  | 0.00 | 0.00 |

Table 32. Unadjusted Presence of Acceleration (Proportion) and Pay Ratios by Gender by Doctorate Type

|  | Female |  | Male |  | ```2017 Female/Male Ratio``` | $\begin{gathered} 2016 \\ \text { Female/Male } \\ \text { Ratio* } \\ \hline \end{gathered}$ | 2015 <br> Female/Male <br> Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Accel | N | Accel | N |  |  |  |
| None | 0.00 | 2 | 0.00 | 0 |  | 0.00 | 0.00 |
| Research | 0.00 | 6 | 0.00 | 1 |  | 0.00 | 0.00 |
| Clinical | 0.09 | 22 | 0.00 | 13 |  | 0.58 | 0.23 |
| Both | 0.00 | 2 | 0.00 | 1 |  | 0.00 | 0.00 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis

Table 33. Unadjusted Presence of Acceleration (Proportion) and Ratios by Gender by Series

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | 2016 Female/Male Ratio* | 2015 <br> Female/Male Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | Accel | N | Accel | N |  |  |  |
| Adjunct | 0.00 | 4 | 0.00 | 1 |  | 0.00 | 0.00 |
| Clinical X | 0.11 | 18 | 0.00 | 10 |  | 0.69 | 0.26 |
| HS Clinical | 0.00 | 6 | 0.00 | 4 |  | 0.00 | 0.00 |
| In Residence | 0.00 | 3 | 0.00 | 0 |  | 0.00 | 0.00 |
| Ladder Rank | 0.00 | 1 | 0.00 | 0 |  | 0.00 | 0.00 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis

## DEPARTMENT OF PHARMACEUTICAL CHEMISTRY (PC)

Table 34 (PC). Unadjusted Median Pay ( $\$ 1,000$ s) and Pay Ratios by Gender by Series and Rank

|  | Female |  |  |  | Male |  |  |  | 2017 <br> Female/Male Ratio |  | 2016 <br> Female/ <br> Male <br> Ratio <br> (X+Y) | $\begin{gathered} 2016 \\ \\ \text { Female/ } \\ \text { Male } \\ \text { Ratio } \\ (Y) \\ \hline \end{gathered}$ | 2015 Female/ <br> Male <br> Ratio (X+Y) | 2015 <br> Female/ <br> Male <br> Ratio <br> (Y) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series Rank | Median $X+Y$ | Median $Y$ | N | Average Years Since Doctorate | Median $X+Y$ | Median Y | N | Average Years Since Doctorate | X+Y | Y |  |  |  |  |
| Adjunct |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0 | 0 | 0 | 0 |
| Associate |  |  | 0 |  |  |  | 0 |  |  |  | 0 | 0 | 0 | 0 |
| Full | 154 |  | 1 | 31.00 | 154 |  | 1 | 28.00 | 1.00 |  | 1.00 | 0.00 | 1.00 | 0.00 |
| Clinical X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Full |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| HS Clinical |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Full |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| In Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  | 136 | 24 | 2 | 7.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate | 174 | 49 | 1 | 20.00 | 147 | 18 | 2 | 17.00 | 1.18 | 2.72 | 1.08 | 1.44 | 1.08 | 1.20 |
| Full |  |  | 0 |  | 179 | 36 | 1 | 15.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Ladder Rank |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Assistant |  |  | 0 |  |  |  | 0 |  |  |  | 0.00 | 0.00 | 0.00 | 0.00 |
| Associate | 143 |  | 1 | 22.00 | 173 | 41 | 3 | 12.00 | 0.83 | 0.00 | 0.85 | 0.00 | 0.85 | 0.00 |
| Full | 186 | 40 | 2 | 30.50 | 264 | 34 | 10 | 30.94 | 0.70 | 1.19 | 0.68 | 0.57 | 0.70 | 0.61 |

## Pharmaceutical Chemistry

Tables 35-44: Gender status analyses: unadjusted campus-level median salary ( $X+Y$ ), presence of $Z$ (proportion), median $Z$ payment, if present, and presence of acceleration (proportion) by gender and these values and their ratios by rank, doctorate type, and series.

Table 35. Unadjusted Presence of Z (Proportion) by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Presence of Z | N | Presence of Z | N | Presence of Z | N |
| Female | 0.20 | 5 | 0.20 | 5 | 0.40 | 5 |
| Male | 0.37 | 19 | 0.21 | 19 | 0.37 | 19 |

Table 36. Unadjusted Median Z Pay, if Present by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Median Z | N | Median Z | N | Median Z | N |
| Female | 10 | 1 | 10 | 1 | 7 | 2 |
| Male | 25 | 7 | 4 | 4 | 25 | 7 |

Table 37. Unadjusted Presence of Acceleration (Proportion) by Gender Status

|  | July 2017 |  | July 2016 |  | July 2015 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Accel | N | Accel | $\mathrm{N}^{*}$ | Accel | $\mathrm{N}^{*}$ |
| Female | 0 | 5 | 0.00 | 10 | 0.00 | 10 |
| Male | 0.15 | 27 | 0.05 | 38 | 0.05 | 38 |

*Note: 2015 and 2016 N represents two year's data for each faculty, thus is double the N of faculty for each analysis
Table 38. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Rank

|  | Female |  | Male |  | 2017Female/MaleRatio | 2016 <br> Female/Male Ratio | $2015$ <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Z | N | Z | N |  |  |  |
| Assistant |  | 0 | 0.5 | 2 | 0.00 | 0.00 | 0.00 |
| Associate | 0.50 | 2 | 0.00 | 5 |  | 0.00 | 1.75 |
| Full | 0.00 | 3 | 0.50 | 12 | 0.00 | 0.00 | 0.75 |

Table 39. Unadjusted Median Z and Pay Ratios, if Present, by Gender by Rank

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | $\begin{gathered} 2016 \\ \text { Female/Male } \\ \text { Ratio } \end{gathered}$ | $\begin{gathered} 2015 \\ \text { Female/Male } \\ \text { Ratio } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Median | N | Median | N |  |  |  |
| Assistant |  | 0 | 25 | 1 | 0.00 | 0.00 | 0.00 |
| Associate | 10 | 1 |  | 0 |  | 0.00 | 0.57 |
| Full |  | 0 | 18 | 6 | 0.00 | 0.00 | 0.11 |

Table 40. Unadjusted Presence of Acceleration and Ratios by Gender by Rank

|  | Female |  | Male |  | $\begin{gathered} 2017 \\ \text { Female/Male } \\ \text { Ratio } \end{gathered}$ | 2016 <br> Female/Male <br> Ratio | 2015 <br> Female/Male <br> Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Accel | N | Accel | N |  |  |  |
| Assistant |  | 0 | 0.00 | 5 |  | 0.00 | 0.00 |
| Associate | 0.00 | 2 | 0.11 | 9 | 0.00 | 0.00 | 0.00 |
| Full | 0.00 | 3 | 0.23 | 13 | 0.00 | 0.00 | 0.00 |

*Note: N represents two year's data for each faculty, thus is double the N of faculty for each analysis

| Table 41. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Doctorate Type |
| :--- |


|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | $\begin{gathered} 2016 \\ \text { Female/Male } \\ \text { Ratio } \\ \hline \end{gathered}$ | $2015$ <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Z | N | Z | N |  |  |  |
| None | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| Research | 0.20 | 5 | 0.37 | 19 | 0.54 | 0.95 | 1.09 |
| Clinical | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| Both | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |

Table 42. Unadjusted Median Z Pay and Pay Ratios, if Present, by Gender by Doctorate Type

|  | Female |  | Male |  | $\begin{gathered} 2017 \\ \text { Female/Male } \\ \text { Ratio } \end{gathered}$ | 2016 <br> Female/Male Ratio | 2015 <br> Female/Male Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Median | N | Median | N |  |  |  |
| None |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Research | 10 | 1 | 25 | 7 | 0.40 | 2.86 | 0.28 |
| Clinical |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Both |  | 0 |  | 0 |  | 0.00 | 0.00 |

Table 43. Unadjusted Presence of Acceleration (Proportion) and Pay Ratios by Gender by Doctorate Type

|  | Female |  | Male |  | 2017 <br> Female/Male Ratio | 2016 <br> Female/Male Ratio* | 2015 Female/Male Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Doctorate Type | Accel | N | Accel | N |  |  |  |
| None |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Research | 0.00 | 5 | 0.15 | 27 | 0.00 | 0.00 | 0.00 |
| Clinical |  | 0 |  | 0 |  | 0.00 | 0.00 |
| Both |  | 0 |  | 0 |  | 0.00 | 0.00 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis

Table 44. Unadjusted Presence of Acceleration (Proportion) and Ratios by Gender by Series

|  | Female |  | Male |  | $2017$ <br> Female/Male Ratio | 2016 <br> Female/Male Ratio* | 2015 <br> Female/Male Ratio* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series | Accel | N | Accel | N |  |  |  |
| Adjunct | 0.00 | 1 | 0.00 | 1 |  | 0.00 | 0.00 |
| Clinical X | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| HS Clinical | 0.00 | 0 | 0.00 | 0 |  | 0.00 | 0.00 |
| In Residence | 0.00 | 1 | 0.14 | 7 | 0.00 | 0.00 | 0.00 |
| Ladder Rank | 0.00 | 3 | 0.16 | 19 | 0.00 | 0.00 | 0.00 |

*Note: 2015 and 2016 Ratio represents two year's data for each faculty, thus is double the N of faculty for each analysis

## Appendix F. Overall Campus Analysis Results, Tables

Table 1. Estimated Female/Male ratio for presence of a clinical incentive $\mathbf{Z}$ payment

| Adjusted ratios* |  | OR |
| :--- | :--- | :--- |
|  |  |  |
| 0.83 |  | Confidence interval |
| $(0.65,1.07)$ |  |  |

*Adjusted for rank, step, type of doctorate, series, and department/school.

Table 2. Estimated Female/Male ratio for presence of an accelerated advancement (July 2014-July 2017)

| Adjusted ratios* |  | OR |  |
| :--- | :--- | :--- | :--- |
|  |  |  | Confidence interval |
| Overall | $0.80,1.40)$ |  |  |

*Adjusted for rank, step, type of doctorate, series, and department/school.

Table 3. Estimated URM/NonURM ratio for presence of a clinical incentive $\mathbf{Z}$ payment

| Adjusted ratios* |  | OR |  |
| :--- | :--- | :--- | :--- |
|  |  |  | Confidence interval |
| Overall | 0.99 | $1.51)$ |  |

*Adjusted for rank, step, type of doctorate, series, and department/school.

Table 4. Estimated URM/NonURM ratio for presence of an accelerated advancement (July 2014July 2017)

| Adjusted ratios* |  | OR |  |
| :--- | :--- | :--- | :--- |
|  |  |  | Confidence interval |
| $(0.25$ | $2.02)$ |  |  |

[^4]
## Appendix G: FSER Data Methodology Review

| Issue |
| :--- |
| Inconsistent inclusion/exclusion of faculty |
| members based on affiliate code |
| Inaccurate compensation data for faculty |
| members on leave |
| Inaccurate doctorate type |
| Inaccurate URM status |
| Different reliance on incentives by |
| departments |
| Time window for analysis |
| Inclusion criteria for BYZ analysis |
| tadder Rankascomparison population |

Assignment to departments

Affiliate code data field is not consistently populated (VA, BCHO, Gladstone)
E.g., $x x x x x x x x$

- Clarify definitions and request department review and update?
- Examples: xxxxxxx
- Add exclusion criteria for faculty who are on leave at time of data pull?
e.g., xxxxx
- Clarify definition of "Other" and "Combination"
- Standardize order of degrees (data fields: degree $1,2,3$ ) and request department review and update?
- URM definition was updated after initial data was released to schools

Confirm race/ethnicity codes categorized as URM

- Request department review and update?
- Would be helpful to analyze at total compensation in addition to $X+Y$ and $B Y Z$ separately
- tadder Rank comprises $10 \%$ of SOM's data set (compared to HS Clinicalat 33\%)

> - Population analyzed for FY17 BYZs included faculty who had partial and no ability to earr incentives ( $3 \%$ hired mid-FY17 and $3 \%$ hired after end of FY17)
> - Possibly create two data sets, one for current year $\mathrm{X}+\mathrm{Y}$ and one for previous year BYZ

- September data pull results in updated payroll data but leaves less time for analysis - Start data validation process earlier for key fields (as described above)


## Department analysis

| Step | -Department-level analysis includes rank, but not step <br> Many departments have insufficient sample size to add variables |
| :--- | :--- |
| Create continuous variable to capture rank/step |  |

Requires further clarification on definition of affiliates and when a faculty member is included/excluded based on affiliate designation. Affiliate data is currently captured in Advance but will need to be validated by the Schools/Departments once these definitions are set. This work will be undertaken after the FY18 FSER report is submitted and a proposal will be developed.
Future data sets will cross-reference faculty who are on leave at the time of data pull. Please note that this will include faculty who have been on leave during reporting period and are active on the date of the data puli; additional assessment will be required by the School/Department to determine whether these faculty should be included/excluded from the analysis, e.g. not all leaves impact pay.

The order in which the degrees appear in the source systems does not impact the analysis; definition of "other" and "combination" is provided in the original FSER report. A report of a degrees recorded in the system for faculty can be provided to the Departments/Schools for validation upon request.
The URM definition was updated to be consistent with current (revised) policy and now provides additional clarity.
By policy, URM status is self-identified at the time of hire; Departments cannot review/update this data field.
Because compensation plans vary widely on how clinical incentives (BYZ) are determined/earned, and in some cases, participation in activities that generate a BYZ are at the faculty member's discretion, campus level analysis has not been conducted on combined the faculty member's discretion, campus level analysis has not been conducted on combin
$X+Y+B Y Z$ compensation. If Schools/Departments believe that this analysis would provide useful information, they can choose to conduct this analysis in addition to the required analysis of $X+Y$ and $B Y Z$ separately.
Ladder Rank is an analytic point regarding the reference group. As all academic series are analyzed, the series chosen as the reference group is immaterial.

Date of Hire can be added to the data set for faculty who were hired in the data reporting field. Schools can conduct additional analysis on whether they should be included in the BYZ population. Please note that this would not capture newly-appointed faculty who were previously hired in a different appointment, e.g. fellow $\rightarrow$ faculty.
As requested by the School of Medicine in FY17, the FSER Committee agreed to a revised timeline in order to increase the accuracy of the data capture. The process in FY18 followed the approved timeline.

Faculty who are participants in an ORU compensation plan should be assigned to the ORU for salary analysis by the School(s). Note that this information is not available in source systems so cannot be provided in the data set. ORUs with their own compensation plan should be required to follow the same analysis as departments.

When a faculty member is first moved above scale, the salary increment is equivalent to a step 10. Faculty can be further advanced within/beyond Above Scale (more than one "step" in the above scale ranks) upon academic review. Using step 10.5 provides a method for addressing faculty who have had subsequent advancements beyond Above Scale

Subspecialty is not a field currently captured in any campus-wide systems. In order to capture this information in a system (e.g. Advance), the Schools would need to develop a definition of subspecialty and/or division that can be universally applied to all departments and establish a list of acceptable values.


[^0]:    ${ }^{1}$ The Committee uses the term "imbalance" rather than "inequity" until such time as any salary differences between groups cannot be explained by non-discriminatory legitimate business practices of the university or campus unit.

[^1]:    ${ }^{1}$ Basic Science departments were: SOM: Anatomy, Biochemistry \& Biophysics, Cellular \& Molecular Pharmacology, Microbiology \& Immunology; SOP: Bioengineering \& Therapeutic Science, Pharmaceutical Chemistry; SOD: Cell \& Tissue Biology. All other departments were considered Clinical departments.

[^2]:    3 "When an administrative stipend is applied, it shall be distinguished and recorded separately from the academic appointment(s) with the use of a specific position title code for administrative stipends."
    https://www.ucop.edu/academic-personnel-programs/academic-personnel-policy/salary-administration/index.html.

[^3]:    Appendix D(a): SON 2018 Appendix to the FSER Report and Action Plan

[^4]:    *Adjusted for rank, step, type of doctorate, series, and department/school.

