#### UC SAN FRANCISCO 2014 FACULTY SALARY EQUITY REVIEW JANUARY 2016 FOLLOW UP REPORT

#### **Executive Summary**

In January 2015, Chancellor Hawgood received and approved a campus-wide 2014 faculty salary equity review. The review was conducted by a joint Academic Senate-Administration Steering Committee ("FSER" or the "Committee"), and the <u>full report</u> was made available to faculty. Deans of the four professional schools were asked by the Chancellor to address any faculty salary imbalances or inequities that may exist and to report school findings and action plans by July 2015.

At the request of Chancellor Hawgood, the FSER Committee was reconvened in October 2015 with the following charges:

- Provide review and comment on each of the School action plans.
- Provide recommendations to the Chancellor regarding the terms of a UCSF program to provide discretionary salary adjustments. This discretionary salary program was the second component of UC President Janet Napolitano's 2015-16 salary program for academic appointees.

The Committee reviewed and investigated the Action Plans of each school. Based upon review of the action plans, the Committee makes the following observations and recommendations:

- Determination of whether salary imbalances are "justified by legitimate non-discriminatory business practices" has subjective inputs. Bias may influence whether or not schools/departments identify salary inequities that warrant correction.
- In some instances no salary inequities were found; however, it was notable that this may have been because there were very few or no URM faculty or no women/men faculty in a particular school, department, or division.
- Achievement of statistical significance should not be the sole indicator that might prompt additional evaluation and action related to salary equity, i.e. schools/departments may identify specific inequities that warrant correction despite no statistically significant findings. When investigating imbalances the Committee recommends more detailed analysis (e.g. matched pair salary analysis) to determine if findings represent an "imbalance" or an "inequity."
- Primary justifications used by some Schools/Departments to explain salary imbalances were the differences between faculty in terms of grant and/or clinical productivity. It is important that other academic endeavors such as teaching, mentoring, and service activities also be considered in the determination of Y salary amounts.

To facilitate the establishment and maintenance of equitable pay at UCSF, the Committee recommends that school/department compensation plans be made explicit regarding the determination of negotiated (Y) salary amounts, and regarding the eligibility for and determination of Z payments. In addition, schools/departments should ensure equal opportunity for activities that link to Y and Z salary payments (e.g., clinical and administrative opportunities).

No salary inequities were found in the Schools of Dentistry, Nursing and Pharmacy. Regarding the UCSF discretionary salary program, the Committee recommends the following:

- School of Dentistry: no discretionary salary adjustments.
- School of Nursing: no discretionary salary adjustments.
- School of Pharmacy: no discretionary salary adjustments.
- School of Medicine: A total of \$1.577M in Y salary adjustments have already been made in FY16 and were applied to 96 faculty in the Department of Medicine (\$857K) and 35 faculty in the Department of Pediatrics (\$720K); an additional \$217K in Y salary adjustments should be made retroactive to July 1, 2015 for 39 faculty in the Department of Medicine and one faculty member in the Department of Neurology. In addition, the Committee recommends that the Department of Medicine conduct further analysis on a remaining gender-based imbalance of \$299,000 in Y salary no later than March 31, 2016.

The Committee reaffirms that for subsequent campus-level FSER reports that school-level action plans be developed. The Committee further reaffirms the importance of ensuring that all schools make their FSER action plans transparent to all faculty and emphasizes that salary inequities addressed as part of the discretionary salary program must not reappear in subsequent years.

# UC SAN FRANCISCO 2014 FACULTY SALARY EQUITY REVIEW JANUARY 2016 FOLLOW-UP

At the request of Chancellor Hawgood, the joint Academic Senate-Administration Steering Committee for Faculty Salary Equity Review ("FSER Committee") was reconvened in October 2015. Vice Provost Brian Alldredge served as the Committee chair. (See Appendix A for committee membership).

#### **COMMITTEE CHARGE:**

The new charge of the FSER committee was two-fold:

- Per the Faculty Salary Equity Report, "The Chancellor may choose to convene a committee to provide comments and recommendations for the school-specific plans proposed in the Action Plans section of this report." Reports from each of the Schools were due on July 31, 2015. The Chancellor asked that the reconvened FSER Committee review and comment on each of the Schools' reports.
- 2) The second component of the 2015-16 academic salary program involved an additional discretionary salary adjustment based on established criteria set forth by the University. As noted in the guidelines, campuses were expected to use their recent FSER in reviewing salaries for these discretionary actions. The Chancellor asked the reconvened FSER Committee to provide recommendations regarding the terms of the UCSF program.

The Committee met seven times between October 2015-January 2016.

#### Charge #1 – Comments and Recommendations on School Action Plans

#### **Background:**

The main findings from the 2014 UCSF Faculty Salary Equity Review included:

- URM vs Non-URM. No evidence of imbalance by URM status was found in salary (X+Y), the presence of and amount of clinical incentives (Z), nor in the presence of accelerated academic advancements.
- Female vs Male. A statistically significant imbalance in salary (X+Y) was found, with females receiving 3% lower salaries compared to males. There was not a statistically significant imbalance by gender in the presence of clinical incentives (Z). However, among those who received a Z, a statistically significant imbalance in the Z amount was found, with females receiving a lower (29%) Z compared to males. There was not a statistically significant difference by gender with regard to the presence of accelerated academic advancement.

It should be noted that the Committee used the term "imbalance" rather than "inequity" until such time as any salary differences between groups could not be explained by non-discriminatory legitimate business practices of the University or campus unit.

The Committee consensus was that local (school-level) implementation of action plans was the most effective way to identify any inequities within specific school structures. As such, the Committee recommended that the chancellor charge each dean with creating a school-specific action plan. These action plans were to include a response to the campus-wide finding of salary imbalance by gender and propose strategies to address inequities if found when school-specific analyses are conducted. The Chancellor accepted the Committee's recommendation and directed the schools to develop and submit their action plans by July 2015.

Per the original FSER report, schools were provided the following guidance with regard to their Action Plans:

- Each school will be provided the raw data from the 2014 data set used for the campus-wide analysis. We suggest that whenever possible schools analyze their data using the methodology described in this report. Analyzing data to generate "residuals," which is the difference between the model-based prediction and the actual salary, may also be a useful way to identify individuals who are under- (or over-) paid based on what would be predicted in the model based on department, rank, degree type, etc. Schools may also choose to analyze data at the level of departments and/or to include other factors that could potentially contribute to salary imbalance but are not included in this campus-wide report.
- If the school-level analysis finds an imbalance, the school must determine if the salary differences can be attributed to non-discriminatory legitimate business practices of the University or campus unit. At a minimum, each action plan should respond to the campus-wide finding of salary imbalance by gender.
- The school-specific action plans must include specific strategies to address inequities that are found. If the school-level analysis finds no evidence of inequity, the responding action plan needs to include a justification for this finding.
- The action plan must include specific timeframes for addressing inequities that are found.
- The school's action plan must be made transparent to the faculty in the school.
- The school's action plan is due July 2015.
- The schools will be provided with an updated data set in July of 2016.
- The schools will be expected to submit to the chancellor a progress report on their action plan by October 30, 2016.

#### Committee Review:

The reconvened FSER committee reviewed and discussed the Action Plans submitted by the schools. The chart below summarizes the schools' initial findings with regard to salary inequities, the Committee's response and its recommendation after reviewing the schools' supplemental reports.

School	Action Plan/Report Submission	Schools Initial Findings and Committee's Response	Committee Subsequent Response and Recommendation
Pharmacy	Original Action Plan dated June 2015	School findings: no statistically significant evidence of inequities.	Accept Action Plan; no inequities found
		Committee accepted Action Plan	

#### Table 1. Summary of Committee Review

School	Action Plan / Report Submission	Initial School Findings and Committee Response	Subsequent Committee Response and Recommendation
Nursing	Original Action Plan dated July 1, 2015 Addendum to FSER Committee, November 22, 2015 <i>(Appendix C)</i>	School findings: no statistically significant evidence of inequities; however, imbalances suggested potential for inequities. Committee requested matched pair salary analysis to determine if findings represent an "imbalance" or an "inequity."	Accepted supplemental analysis and action plan; no inequities found.
Dentistry	Faculty Salary Equity Report dated October 12, 2015 Supplemental Report, November 20, 2015 <i>(Appendix D)</i>	School findings: no statistically significant evidence of inequities; however, imbalances suggested potential for inequities. Committee requested additional analysis to understand why women receive lower Z payment amounts; more data to support department responses; and additional matched-pair X+Y salary analysis to determine if findings represent an "imbalance" or an "inequity."	Accepted supplemental analysis and action plan; no inequities found.
Medicine	Follow-up to School of Medicine's Action Plan (January 2016) <i>(Appendix E)</i>	School findings: seven departments reported statistically significant differences in salary (Y or Z) and steps to address or monitor these differences. Committee requested additional analysis and detail regarding findings and steps taken to address existing inequities.	Accepted supplemental analysis and action plans; Committee recommended further analysis by one department (Medicine) post- submission of this report.

Table 1. Summary of Committee Review (Continued)

#### Analysis and Discussion:

The FSER Committee identified challenges to the ability to meet Charge #1:

- There are more than two dozen compensation plans across the campus. This leads to complexity in assessing how faculty salaries are determined and whether inequities (versus imbalances) exist. For example, how departments/schools address shortfalls in funding available to cover NIH over-the-cap salary support varies and may impact negotiated salary if grant productivity is a main factor in Y salary negotiation. Similarly, how salary support is determined for administrative roles is not standardized across the schools or even by departments within the schools.
- Determination of whether salary imbalances are "justified by legitimate non-discriminatory business practices" has subjective inputs. For various reasons—e.g. complexity of analysis, potential for cost implications, and departmental needs for faculty who have very diverse activities with varying funding sources—bias may influence whether or not departments identify inequities that warrant correction.
- Uniformity in analysis at the campus level may obscure meaningful details and variation within schools, sites, departments, and disciplines; which require more detailed information and analysis.
- In some instances no salary inequities were found; however, it was notable that this may have been because there were very few or no URM faculty or no women/men faculty in a particular school, department, or division.

Despite the complexity of factors involved in analyzing and determining salary inequities, the FSER Committee was able to offer the following observations in response to the school Action Plans:

- Achievement of statistical significance should not be the sole indicator that might prompt additional evaluation and action related to salary equity, i.e. schools/departments may identify specific inequities that warrant correction despite no statistically significant findings.
- Data to analyze salary imbalances at the subspecialty level were not available at the campus level but were available at the departmental or division level. While this supports the need for school- or department-based action plans, it also highlights other issues that contribute to salary imbalances, such as fewer women in higher paying subspecialties than men.
- The rate of accelerated advancement was considered in the original FSER campus-level report and no evidence was found to suggest that this impacted salary equity. However, it is acknowledged that this should be monitored over time as data continues to be accrued in Advance which will support a more robust analysis.
- The committee noted that a primary justification used by some schools or departments was that an inequity did not exist because the salary difference may be attributed to differences in grant and/or clinical productivity. In schools/departments where Y salary negotiation is linked to grant and/or clinical productivity, schools/departments should be cognizant of the potential unintended consequences of using grant and/or clinical productivity as the sole justification for salary difference between faculty members. In these Schools/Departments it is important to consider other academic endeavors such as teaching, mentoring, and service activities in the determination of Y salary. Specifically, the Committee noted that there are studies showing

differences by gender<sup>1</sup> and by race<sup>2</sup> in the success rates for NIH grants. Similarly, there is an impression that women and URM faculty might be asked to do a disproportionate amount of service and mentoring activities, which may impact their ability to enhance grant productivity and/or revenue producing clinical activities.

To facilitate the establishment and maintenance of equitable pay at UCSF, the Faculty Salary Equity Review Committee recommends the following:

- When salary imbalances are found, school Action Plans should investigate using consistent and transparent criteria to determine if there is an inequity. If an inequity is found, it should be addressed in clear and measurable terms and linked to specific dollar values.
- In recognition of the complexity of salary components at UCSF, the Committee recommends that school and/or department compensation plans must be explicit regarding how negotiated salaries (Y) are determined and periodically re-evaluated.
- Schools and/or department compensation plans must be explicit regarding who is eligible to receive Z payments and how Z payments are calculated:
  - Particular attention should be paid to the appropriate use of Z payments for administrative roles, rather than incorporating these payments into negotiated (Y) salary.
  - Departments for which incentives are tied to clinical productivity (RVUs or other calculations) should ensure that the availability of these opportunities is equitable and transparent.
- Schools should provide additional training and education as follows:
  - Enhance the sensitivity of department chairs and division chiefs to gender-based and URM-based salary inequities.
  - Because it was noted that the use of accelerated advancement actions is not consistent across the campus and may impact salary equity over time, education specific to accelerated actions should include:
    - Deans' offices should educate departmental promotion committees as well as faculty on the academic advancement process and the criteria for accelerated advancement.
    - A recommendation to deans' offices, department chairs, and promotion committees to proactively evaluate faculty for accomplishments which warrant consideration of accelerated action.
- To facilitate equal opportunities for all faculty, the process for assigning leadership positions must be transparent.

The original charge to the deans included: "The school's action plan must be made transparent to the faculty in the school." In some instances, it was unclear to the Committee the level to which the Action Plans were available to faculty. The Committee reaffirms the importance of ensuring that all schools make their action plans transparent to all faculty within the school without specifically identifying any individual faculty member in the report. The Committee further notes that transparency

<sup>&</sup>lt;sup>1</sup> <u>https://nexus.od.nih.gov/all/2014/08/08/women-in-biomedical-research/#</u>

<sup>&</sup>lt;sup>2</sup> Race, Ethnicity and NIH Research Awards. Donna K. Ginther et al. Science 333, 1015 (2011).

alone will not ensure that inequities do not reappear; therefore, annual analysis and monitoring is also essential.

#### Charge #2 – Recommendations on UCSF Discretionary Salary Adjustments

#### Background:

In August 2015, the University announced the <u>2015-16 salary program for academics</u>. There are two components to this program:

- 1. The salary scales for faculty and non-represented academics were adjusted by 1.5% retroactive to July 1, 2015.
- 2. Faculty may also be considered for an additional discretionary salary adjustment based on established criteria set forth by the University. As noted in the guidelines, campuses are expected to use their recent Faculty Salary Equity Studies in reviewing salaries for these discretionary actions.

At UCSF, the discretionary salary program will be administered at the campus level. Further, as guidance to the FSER committee, the Chancellor's Executive Committee (CEC) reaffirmed the campus commitment to address inequities rather than apply across-the-board discretionary salary increases.

Additional context for consideration with regard to the discretionary program included:

- Discretionary adjustments should be made retroactive to July 1, 2015, to the extent possible, and should be allocated by the end of December 2015.
- Campuses will be asked to report to UCOP on the discretionary actions taken. An explicit
  accounting will be due by February 1, 2016.
- Discretionary actions will be on the "Y" portion of the salary.
- The discretionary actions should not include regular merit, recruitment, and retention actions.

The UC Program Guidelines provide further guidance specific to HSCP faculty: "An amount from an appropriate fund source and up to 1.5% of the base salary will be dedicated to this discretionary salary program." In this context, base salary is defined as X + X'. Rather than doing a detailed analysis of the appropriateness of available fund sources, an initial calculation was done to determine 1.5% of all faculty base salaries at UCSF regardless of fund sources (see Table 2).

	Dentistry	Medicine	Nursing	Pharmacy	Campus Total
Total	\$9.9M	\$245.5M	\$11.4M	\$10.2M	\$277M
1.5% of Total	\$150K	\$3.7M	\$170K	\$154K	\$4.2M

#### Table 2. Prorated Base Salaries (X+X') by School.<sup>3</sup>

As the Committee analyzed inequities identified in the school action plans, this information was used as a benchmark for developing criteria on how to administer the discretionary portion of the Academic Salary Program. Based on the reported inequities, a more detailed calculation of base salary funding sources was not required.

<sup>&</sup>lt;sup>3</sup> Faculty included in these calculations are those in the five series at 51% time or greater. Excluded are those at the Instructor rank or indicated as paid by an affiliate in Advance. From that set, the 54 faculty at the Above Scale rank were further excluded from the calculations. X, X' and Total X salaries for part-time faculty have been prorated according to percent time. Faculty population as of 04/13/15. Salaries as of 06/22/15.

#### **General Recommendations:**

Based on review of the 2015-16 Academic Salary Program Guidelines and the School Action Plans, the Committee developed the following principles for the UCSF Discretionary Salary Program:

- Because inequities are not spread evenly across the campus, if inequities are identified within a school, the school is responsible for assuring inequities are addressed and for bearing all of the costs for correcting the inequities.
- Use of central campus funds to correct inequities would potentially impact allocation of central funds for other purposes; therefore, the committee recommends that central funds not be used.
- If the total amount of salary inequities does <u>not</u> exceed 1.5% of the campus total of X+X', all inequities in Y salaries should be corrected retroactive to July 1, 2015.
- If the total amount of salary inequities <u>does</u> exceed the 1.5% of the campus total of X+X', then the following principles should apply:
  - There should be some mitigation strategy for all inequities.
  - The first priority should be to assistant professors.
  - If all inequities cannot be addressed in 2015-16, schools must indicate an explicit timeline to address the inequities in subsequent year(s).
- Inequities that are addressed must not reappear in subsequent years. If they reappear or new
  inequities are found they must be addressed according to the same principles and within the
  same academic year.

#### School-Specific Recommendations for the 2015-16 Discretionary Salary Program:

- School of Pharmacy: As noted in the Committee Review section of this report, no salary inequities were found.
- School of Nursing: As noted in the Committee Review section of this report, no salary inequities were found.
- School of Dentistry: As noted in the Committee Review section of this report, no salary inequities were found.
- School of Medicine: There were seven departments in the School of Medicine that reported a gender- or URM-based imbalance in compensation.
  - Three of the seven departments (Family & Community Medicine, Orthopedic Surgery, and Otolaryngology) reported an imbalance in the "Z" payments. Upon further detailed analysis by each Department, the Committee accepted the School's assessment that the imbalances did not represent an inequity.
  - Four of the seven departments reported an imbalance in negotiated "Y" salary. It was determined that one of the four departments (Obstetrics and Gynecology) did not have a URM-based inequity in Y salary upon further analysis by specialty. For the remaining three departments, the Committee acknowledges that \$1.577 million of these genderbased inequities have already been proactively corrected by the Departments of Medicine and of Pediatrics in FY16. A total of \$217k in additional salary adjustments retroactive to July 1, 2015 is expected(Departments of Medicine and Neurology) to correct gender-based inequities.
  - In addition, the Committee recommends that the Department of Medicine conduct further analysis on a remaining gender-based imbalance of \$299,000 in Y salary no later than March 31, 2016. If further inequities are identified, they should be corrected retroactive to

July 1, 2015. Upon review and assessment by the Dean of the School of Medicine, the Department of Medicine's analysis and Action Plan should be submitted to the Chancellor in order to document, and amend if necessary, the report of total salary inequities addressed.

Because the total amount of salary inequities did not exceed the 1.5% of the campus total (nor the School of Medicine total) of X+X', and in accordance with the guidelines provided by UC Office of the President, the Committee recommends that all of the remaining inequities identified by these departments be corrected retroactive to July 1, 2015.

Department	Summary of Analysis and Findings
Family & Community Medicine	<b>Z payment imbalance by URM status identified</b> Based on matched-pair analysis, no evidence of URM-based inequity in the amount of Z payment
Medicine	<ul> <li>Negotiated (Y) salary imbalance by gender identified</li> <li>(a) Gender-based inequities in negotiated salary were previously addressed in FY16 (\$857K; N=96);</li> <li>(b) Additional retroactive salary adjustments expected for FY16 (\$187K; N=39) to address further gender-based salary inequities;</li> <li>(c) Remaining imbalances still to be analyzed and addressed as appropriate (up to \$299K; N=63). If inequities are found they should be addressed retroactive to July 1, 2015.</li> </ul>
Neurology	<b>Negotiated (Y) salary imbalance by gender identified</b> One gender-based inequity to be corrected retroactive to 07/01/15 (\$30K; N=1)
Obstetrics, Gynecology, & Reproductive Sciences	<b>Negotiated (Y) salary imbalance by URM status identified</b> Based on further detailed analysis, no evidence of URM-based difference in Y salary.
Orthopaedic Surgery	<b>Z payment imbalance by URM status identified</b> Based on analysis by site and surgical vs. non-surgical subspecialty, no evidence of URM-based imbalance in the amount of Z payment
Otolaryngology, Head and Neck Surgery	<b>Z payment imbalance by gender identified</b> Based on analysis by team-based metrics as well as individual RVU productivity, no evidence of gender-based imbalance in the amount of Z payment
Pediatrics	<b>Negotiated (Y) salary imbalance by gender identified</b> Gender-based inequities in negotiated salary were previously addressed in FY16 (\$720K; N=35); no subsequent evidence of gender-based difference in Y salary identified.

#### Table 3. Summary of Analysis and Findings by Department, School of Medicine

#### Table 4. School of Medicine Faculty Salary Equity Adjustments\*

	Corrections Enacted FY16	Potential Additional Adjustments to be made in FY16	Total
Department	\$ (N)	\$ (N)	\$ (N)
Medicine <sup>^</sup>	\$857,104 (96)	\$187,000 (39)	\$1,044,104 (135)
Pediatrics	\$719,822 (35)	-	\$719,822 (35)
Neurology	-	\$30,000 (1)	\$30,000 (1)
Total	\$1,576,926 (131)	\$217,000 (40)	\$1,793,926 (171)

\*Note: The population considered is limited to those identified in the original FSER analyses. ^Additional analysis of gender-based imbalance in Y salary (\$299,000) is required.

#### Conclusion

With the submission of this report, the charges to this committee are complete.

The Committee would like to conclude by re-emphasizing two general recommendations made within this report:

- The Committee reaffirms the importance of ensuring that all schools make their action plans transparent to all faculty within the school. The committee recommends that this report and addenda, which includes the schools' action plans, be made available on the <u>Academic Affairs</u> <u>website</u> along with the original FSER report.
- 2) The Committee notes that transparency alone will not ensure that inequities do not reappear, therefore annual analysis and monitoring is also essential.

## Appendix A. Committee Membership

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

Member Name	Administrative/Academic Titles
Brian Alldredge, PharmD, Chair	Vice Provost Academic Affairs Professor of Clinical Pharmacy
Sheila Brear, BDS*	Associate Dean for Academic Affairs, School of Dentistry Associate Health Sciences Clinical Professor, Department of Preventive and Restorative Dental Sciences
Shari Dworkin, PhD, MS	Associate Dean for Academic Affairs, School of Nursing Professor of Social and Behavioral Sciences
Elena Fuentes-Afflick, MD, MPH	Vice Dean for Academic Affairs, School of Medicine Professor of Pediatrics
Gordon Fung, MD, MPH, PhD	Representative, Academic Senate Committee on Equal Opportunity Health Sciences Clinical Professor of Medicine
David Glidden, PhD	Representative, Academic Senate Committee on Academic Personnel Professor of Epidemiology & Biostatistics In Residence
Wilson Hardcastle, MLIS	Academic Data Coordinator, Office of Academic Affairs
Leah Karliner, MD*	Representative, Academic Senate Committee on Faculty Welfare Associate Professor of Medicine in Residence
Thomas Kearney, PharmD	Associate Dean for Academic Affairs, School of Pharmacy Professor of Clinical Pharmacy
Cynthia Lynch Leathers, MBA	Assistant Vice Provost Academic Affairs
Catherine Lomen-Hoerth, MD, PhD	Professor of Clinical Neurology
Charles E. McCulloch, PhD	Professor, Epidemiology & Biostatistics
Renee Navarro, MD, PharmD	Vice Chancellor for Diversity and Outreach Health Sciences Clinical Professor of Anesthesia & Perioperative Care

\*New representatives beginning October 2015 to replace original members who had retired.

# Faculty Salary Equity Review for the School of Pharmacy June, 2015

## Background:

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

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

- Gender: The campus-wide results revealed a statistically significant imbalance with females receiving a 3% lower salary when compared with males (adjusted by rank, step, series, doctorate, and other variables). An imbalance of Z payments (for clinical incentives) was also revealed with females receiving 29% lower payments than males.
- URMs: No imbalance was detected for underrepresented minorities.

In response, the School formed a committee and conducted a gender equity analysis of School of Pharmacy faculty salaries to determine if any imbalances exist at the School or department levels. Note that an URM analysis was not undertaken due the small number (4), of URM faculty in the school of pharmacy. Associate Dean for Academic Affairs, Thomas Kearney, led this committee. Representatives from each Department were appointed to include: Sharon Youmans (Dept. of Clinical Pharmacy), Tanja Kortemme (Dept. of Bioengineering and Therapeutic Sciences), Zev Gartner (Dept. of Pharmaceutical Chemistry), and James Lightwood (to serve as the committee's statistician).

The goal for the review was, no later than July 1, 2015, to complete our analysis, report our findings to the faculty, and implement an action plan to remedy any identified salary imbalances.

### Methods:

- The dataset of faculty salary data for the school of pharmacy was provided as an excel spreadsheet by the campus Office of Academic Affairs. It was segregated from the same dataset utilized by the campus-level review and included salary data as of July 1, 2014. Therefore, the inclusion and exclusion criteria, and analysis variables were maintained. Accelerations were defined as any merit or promotion action during the 2012-2013 and 2013-2014 academic years.
- This school-level data set was analyzed in Stata 12 with same analytical plan as enumerated the 2014 campus-wide report.
- The dataset was further segregated by department to provide an unadjusted analysis of salary and acceleration variables by gender. Note that we included an additional table of unadjusted

Median X + Y pay and Pay Ratios by Series and Rank. This allowed for more detailed group stratification.

- The Department-level datasets were presented to each Department Chair and an explanatory response for any potential imbalances was requested.
- The results were presented to the school committee for comment and concurrence.
- A report provided to the Dean with an executive summary.
- A presentation of the highlights of the analysis presented at the June meeting of the full faculty.

## **Executive Summary**

**Conclusion:** There were no gender imbalances in faculty salaries for the school of pharmacy based on a school-wide adjusted analysis on Median X + Y pay. There was a more likely probability of women to receive a Z payment, which were exclusively provided for administrative stipends (Chair, Vice Dean, Vice Chair, Associate Dean). All gender imbalances (female and male-preferences) at the Department-level were explained by non-discriminatory legitimate business practices.

## Main findings:

- There was no statistically significant difference between X + Y pay for female and male faculty when fully adjusted by rank, step, and series on a school-wide level.
- More women have a Z payment (RR =1.9), however, this was not statistically significant. Note that Z payments in the School of pharmacy are exclusively provided as administrative stipends (Vice Dean, Associate Dean, Chairs, Vice Chairs) in contrast to the campus-level practice as a means for clinical incentives.
- Differences for unadjusted median X + Y pay by gender, series , and rank at the school-wide level were associated with differences in the average years since achieving a doctorate degree (range of 10-20 years) with a preference for males at the full professor rank in the HS Clinical and Ladder Rank series. Other series and rank differences were associated with small sample size comparators.
- There were no statistically significant differences between adjusted X + Y pay for women and men at any department.
- The Department of Bioengineering and Therapeutic Sciences (BTS) had higher male/female ratio in unadjusted Median X+ Y pay at the full professor rank, which is explained by a higher proportion of males with more years at rank (and higher step), as well as to accommodate 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 and, in one case, as a retention incentive. These factors also explain a higher proportion of accelerations for females. Females at full professor rank also a have higher occurrence of Z payment for additional administrative duties. None of these differences were statistically significant, however, due to the low numbers resulting in large confidence intervals.

- The Department of Clinical Pharmacy (CP) had male-preference imbalances for unadjusted Median Y pay and Median X + Y pay for the HS Clinical Series which was attributed to two male senior faculty members in leadership positions associated with substantial administrative responsibilities.
- CP had a female-preference imbalance for the presence and Median amount of a Z payment attributed to the leadership positions held by female faculty (Chair, Vice Dean, Associate Dean, Vice Chair).
- CP had a female-preference in unadjusted Median X + Y pay and Y pay for adjunct faculty attributed to higher rank (both females are Full Professors vs Associate Professor rank for both males) and ability to acquire extramural funding and providing significant service to the Department (note that one female and one male receive Y pay in the adjunct series).
- 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. The difference is attributed to ability to meet the Department's compensation goal for acquiring extramural grant-based revenue support. In addition, there is only one female comparator for both ranks in the Ladder rank series.
- PC had a male-preference imbalance for the presence and Median amount of a Z payment attributed to the leadership positions held by male faculty (Chair, Vice Dean, Vice Chair).
- PC has recruited a female and male at both the Assistant Professor rank and the Full Professor rank and provided the same salary level for both genders at each rank.

## Committee consensus on action plan:

- 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.

### **Results:**

<u>School-wide analysis</u>: Note that conclusions are generated by Dr Lightwood. Dr Chuck McCulloch was the statistician for the campus-wide analysis.

Female/Male X + Y (\$1,000s) Pay Ratio-SOP				
	Ratio	Confidence Interval		
Unadjusted	0.906	(0.803, 1.02)		
Fully Adjusted	1.00	(0.947, 1.06)		

<u>Conclusion</u>: no statistically significant difference between X + Y pay for women and men, though unadjusted point estimate of ratio of women's to men's pay is 0.906. After adjustment for explanatory factors selected for the campus report, point estimates indicate no pay inequity between women and men. The results are similar to those for campus as whole, except the point estimates indicated SOP closer to equity than campus.

Female/Male Presence of Z			
Risk Ratio		Confidence Interval	
Unadjusted	1.72	(0.869, 3.40)	
Fully Adjusted	1.90	(0.829, 4.37)	

<u>Conclusion</u>: Women are more like to have any Z payment, almost twice as likely. However the confidence intervals for the risk ratio are quite wide, and the null of a statistically significant difference cannot be rejected at the 5 percent significance level. The results for SOP are in contrast for those for the campus as whole, where women are less likely to have any Z payment, though there is a borderline acceptance of the null of no difference for the campus, at the 5 percent significance level.

Female/Male Z Pay (\$1,000s) Ratio				
	Ratio	Confidence Interval		
Unadjusted	1.21	(0.438, 3.32)		
Fully Adjusted	1.02	(0.00785, 132)		

<u>Conclusion</u>: McCulloch's analysis appears to use the log transform, so we follow that approach and analyze the ratio of Z Pay between women and men, conditional on receipt of any Z Pay. This approach is consistent with breaking the analysis up into two parts: one for receipt of non-zero amount, and another for ratio of amount conditional on receipt. The null of no difference in Z Pay, conditional on receiving non-zero amount, cannot be rejected at the 5 percent level. Note that in contrast to campus as a whole, where unadjusted analysis shows Z-payments to women are smaller than for men, Z Payments in SOP to women are larger than those to men. The adjusted point estimates indicate equity for SOP, though due to small numbers, the confidence intervals for are extremely wide. However the point estimate is roughly consistent with that for the campus as whole, at least in practical terms.

Female/Male Inciden		
	Incidence Ratio	Confidence Interval
Unadjusted	0.702	(0.222, 2.22)

Unadjusted	0.702	(0.222, 2.22)
Fully Adjusted	0.216	(0.0232, 2.02)

<u>Conclusion</u>: the unadjusted point estimates for SOP are similar to those for the campus as a whole, however due to small numbers, the confidence interval for SOP is much wider. The adjusted point estimate is much smaller than the unadjusted, and moves in opposite direction than for campus as a whole. For the campus as a whole, the adjusted estimates move towards an incidence ratio of unity, while for SOP the adjusted estimates mover further away from unity than the unadjusted ratio. For SOP, neither unadjusted nor adjusted estimates reject the null hypothesis of no difference at the 5 percent level of significance. Note that, due to small numbers, the incidence rate ratio regression used for adjustment for SOP data shows several signs of instability, and may not be reliable. However, after trying several alternative approaches to adjusted analysis, I could not find one that was more stable, or produced more definite results for the incidence ratio for gender. It may be very difficult to produce a stable regression estimate with such a small number of events and so many explanatory variables in the regression.

# **Unadjusted School-level analysis**

		F	emale	Male			
Series	Median	N	Average Years Since Doctorate	Median	N	Average Years Since Doctorate	Female/Male Ratio
Adjunct							
Assistant		0			0		
Associate	168	1	18	136	4	29	1.24
Full	137	3	26	147	1	26	0.93
Clinical X							
Assistant	121	3	5		0		
Associate		0		130	4	13	
Full	157	8	25	159	5	27	0.98
HS Clinical							
Assistant	134	1	24		0		
Associate	134	3	22		0		
Full	143	3	25	182	2	45	0.78
In Residence							
Assistant		0			0		
Associate	140	1	13	155	2	13	0.90
Full	204	2	32	194	2	24	1.05
Ladder Rank							
Assistant	126	1	7	128	8	8	0.98
Associate	147	1	20	165	2	15	0.89
Full	197	8	24	269	13	34	0.73

 Table 33 Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Series and Rank

Note that ratios less than 1 indicate a male preference and greater than 1 indicate a female preference.

"----" indicates lack of a gender comparator.

**Summary:** Imbalances for adjunct associate, HS Clinical full, and ladder rank full are associated with large differences in the average years since doctorate (range of 10-20 years). Other series and rank imbalances are associated with small sample size comparators.

# **Department-level Analysis**

## Adjusted Departmental Analysis

## Female/Male X + Y Pay (\$1,000s) Ratio

BIS		
	Ratio	Confidence Interval
Unadjusted	0.961	(0.702, 1.31)
Fully Adjusted*	1.11	(0.948, 1.30)
Clin Pharm		
	Ratio	Confidence Interval
Unadjusted	1.02	(0.895, 1.17)
Fully Adjusted*	0.9998	(0.928, 1.08)
Pharm Chem		
	Ratio	Confidence Interval
Unadjusted	0.810	(0.547, 1.20)
Fully Adjusted*	0.937	(0.834, 1.05)

\*Perfect co-linearity in some explanatory variables.

<u>Conclusion</u>: no statistically significant difference between X + Y pay for women and men in any department. Results for Bioengineering and Therapeutic Sciences (BTS) and Clinical Pharmacy (CP) are similar to those for whole of SOP. Point estimates indicate some gender disparity in Pharmaceutical Chemistry (PC), whoever neither adjusted nor unadjusted statistically significant at the 5% level, though lack of statistical significance for Fully Adjusted estimates may be due to small number in sample.

### **Unadjusted Department-level analysis**

Note that ratios less than 1 indicate a male preference and greater than indicate a female preference. "----" indicates lack of a gender comparator.

Note that all names of faculty were redacted from the Department explanations.

# **Department of Bioengineering and Therapeutic Sciences (BTS)**

 Table 17. Unadjusted Median Salary X+Y (\$1,000s)by Gender Status

Gender/BTS	Median X+Y	Ν
Female	199	8
Male	157	15

#### Table 17.1 Unadjusted Median Salary Y(\$1,000s) by Gender Status

Gender/BTS	Median Y	Ν
Female	36	8
Male	23	15

Table 18. Unadjusted Presence of Z (Proportion) by Gender Status

Gender/BTS	Presence of Z	Ν
Female	0.63	8
Male	0.13	15

Table 19. Unadjusted Median Z (\$1,000s)Pay, if Present by Gender Status

Gender/BTS	Median Z	Ν
Female	5	4
Male	1	2

**Table 20.** Unadjusted Presence of Acceleration (Proportion) by Gender Status

Gender/BTS	Accel	Ν
Female	0.25	16
Male	0.13	30

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

 Table 21. Unadjusted Median X+Y Pay(\$1,000s) and Pay Ratios by Gender by Rank

BTS	Female		Male		Female/M ale
Rank	Median	Ν	Median	Ν	Ratio
Assistant	126	1	126	5	1.00
Associate		0	155	2	
Full	201	7	253	8	0.79

**EXPLANATION:** FULL: BTS has a number of senior male Full Professors with high X salary components whereas, as a group, the female Full Professors have less years of tenure and thus lower X salaries.

Table 21.1 Unadjusted Median Y Pay (\$1,000s) and Pay Ratios by Gender by Rank

BTS	Female		Male	Female/Male	
Rank	Median	Ν	Median	Ν	Ratio
Assistant	23	1	23	5	1.00
Associate		0	32	2	
Full	44	7	37	8	1.19

**EXPLANATION:** BTS has two male Full Professors with no Y salary components based on their relatively small research portfolios. Additionally, one female Full Professor has a large Y component due to a retention offer.

BTS	Female		Male	Female/Male	
Rank	Z	Ν	Z	Ν	Ratio
Assistant	0.00	1	0.00	5	
Associate		0	0.00	2	
Full	0.71	7	0.25	8	2.86

Table 22. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Rank

 Table 23. Unadjusted Median Z (\$1,000s) and Pay Ratios, if Present, by Gender by Rank

BTS	Female		Male	Female/Male	
Rank	Median	Ν	Median	Ν	Ratio
Assistant		0		0	
Associate		0		0	
Full	1	5	0.5	2	2.00

**EXPLANATION:** BTS makes Z payments to the PIs in return for the PIs assuming additional roles and responsibilities. Proportionally more female Full Professors than male Full Professors have volunteered for, and been selected to take on, these additional duties (e.g. Chair, Vice Chair, Program Director for Graduate Programs).

Table 24. Unadjusted Presence of Acceleration and Ratios by Gender by Rank

BTS	Female		Male	Female/Male	
Rank	Accel	Ν	Accel	Ν	Ratio
Assistant	0.00	2	0.00	10	
Associate		0	0.00	4	
Full	0.29	14	0.25	16	1.14

**EXPLANATION:** These proportions are sufficiently close and do not require an explanation.

Table 25. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Doctorate Type

BTS	Female		Male		Female/Male	
Doctorate Type	Median	Ν	Median	Ν	Ratio	
None		0		0		
Research	199	8	157	14	1.26	
Clinical		0		0		
Both		0	312	1		

**EXPLANATION:** The vast majority of the female professors in BTS are Full Professors and thus have higher salaries.

BTS	Female		Male	Female/Male	
Doctorate Type	Median	Ν	Median	Ν	Ratio
None		0		0	
Research	36	8	23	14	1.59
Clinical		0		0	
Both		0	175	1	

 Table 25.1
 Unadjusted Median Y Pay (\$1,000s) and Pay Ratios by Gender by Doctorate Type

**EXPLANATION:** The female professors have less years of tenure than the males and thus lower X components. They also tend to have large research portfolios. The combination then leads to reasons for them to have higher Y components of their salaries.

Table 26. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Doctorate Type

BTS	Female		Male		Female/Male
Doctorate Type	Z	Ν	Z	Ν	Ratio
None		0		0	
Research	0.63	8	0.07	14	8.75
Clinical		0		0	
Both		0	1.00	1	

**EXPLANATION:** BTS makes Z payments to the PIs in return for the PIs assuming additional roles and responsibilities. Proportionally more female Full Professors than male Full Professors have volunteered for, and been selected to take on, these additional duties (e.g. Chair, Vice Chair, Program Director for Graduate Programs).

Table 27. Unadjusted Median Z Pay (\$1,000s) and Pay Ratios, if Present, by Gender by Doctorate Type

BTS	Female		Male		Female/Male
Doctorate Type	Median	Ν	Median	Ν	Ratio
None		0		0	
Research	1.0	5	0.5	1	2.00
Clinical		0		0	
Both		0	1	1	

**EXPLANATION:** Over 25% of the total Z payments made are in context of the Chair's stipend (the largest stipend paid by far) and the Chair happens to be female.

 Table 28. Unadjusted Presence of Acceleration (Proportion) and Pay Ratios by Gender by Doctorate Type

BTS	Female		Male		Female/Male
Doctorate Type	Accel	Ν	Accel	Ν	Ratio
None		0		0	
Research	0.25	16	0.11	28	2.33
Clinical		0		0	
Both		0	0.50	2	

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

**EXPLANATION:** Over time the proportion of female professor hired vs. male has shifted from more male, to more female to more male. Over the 2 years in question, the careers of the "more female" tranche of professors hit the point that accelerated promotions could be expected in response to rapid career growth – which was the case (both career growth and accelerations). In the relatively near future, the proportion of males with accelerations could well go up. Over a longer time period this ratio is likely to become closer 1.0.

BTS	Female		Male		Female/Male
Series	Median	Ν	Median	Ν	Ratio
Adjunct	134	1	139	1	0.96
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0	194	2	
Ladder Rank	201	7	164	12	1.22

Table 29. Unadjusted Median X+Y Pay(\$1,000s) and Pay Ratios by Gender by Series

**EXPLANATION:** Addressing only the Ladder Rank %s. BTS has two clusters of male professors; those who are Full Professors with significant tenure, the other predominantly Assistant Professors with substantially less tenure. The female professors on the other hand tend to cluster more closely together at the Full Professor level. Thus the Median for the male group is lower than that for the female group.

Table 29.1 Unadjusted Median Y Pay(\$1,000s) and Pay Ratios by Gender by Series

BTS	Female		Male	Female/Male	
Series	Median	Ν	Median	Ν	Ratio
Adjunct	7	1	20	1	0.35
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0	42	2	
Ladder Rank	44	7	25	12	1.74

**EXPLANATION:** ADJUNCT: Only one data point for each gender. The Male professor has a lower X and a larger lab, hence the reason the Y is higher. LADDER: The female professors have less years of tenure than the males and thus lower X components. They also tend to have large research portfolios. The combination then leads to reasons for them to have higher Y components of their salaries.

BTS	Female		Male	Female/Male	
Series	Z	Ν	Z	Ν	Ratio
Adjunct	0.00	1	0.00	1	
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0	0.00	2	
Ladder Rank	0.71	7	0.17	12	4.29

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

**EXPLANATION:** BTS makes Z payments to the PIs in return for the PIs assuming additional roles and responsibilities. Proportionally more female Professors than male Professors have volunteered for, and been selected to take on, these additional duties (e.g. Chair, Vice Chair, Program Director for Graduate Programs).

**Table 31.** Unadjusted Median z Pay(\$1,000s) and Pay Ratios, if Present, by Gender by Series

BTS	Female		Male	Female/Male	
Series	Median	Ν	Median	Z	Ratio
Adjunct		0		0	
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0		0	
Ladder Rank	1	5	1	2	2.00

**EXPLANATION:** BTS makes Z payments to the PIs in return for the PIs assuming additional roles and responsibilities. Proportionally more female Professors than male Professors have volunteered for, and been selected to take on, these additional duties (e.g. Chair, Vice Chair, Program Director for Graduate Programs).

Table 32. Unadjusted Presence of Acceleration (Proportion) and Ratios by Gender by Series

BTS	Female		Male		Female/Male
Series	Accel	Ν	Accel	Ν	Ratio
Adjunct	0.00	2	0.00	2	
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0	0.00	4	
Ladder Rank	0.29	14	0.17	24	1.71

**EXPLANATION:** Over time the proportion of female professor hired vs. male has shifted from more male, to more female to more male. Over the 2 years in question, the careers of the "more female" tranche of professors hit the point that accelerated promotions could be expected in response to rapid career growth – which was the case (both career growth and accelerations). This has led to a corresponding increase in accelerated promotions for this group. Over a longer time period this ratio is likely to become closer 1.0.

BTS	Female		Male		Female/Male
Series	Median	Ν	Median	Ν	Ratio
Adjunct					
Full	134	1		0	
Associate		0	139	1	
Ladder Rank					
Full	201	6	285	6	0.70
Associate		0	171	1	
Assistant	126	1	126	5	1.00

 Table 33 Unadjusted Median X+Y (\$1,000s) and Pay Ratios by Gender by Series and Rank

**EXPLANATION:** BTS has a number of senior male Full Professors with high X salary components whereas, as a group, the female professors have less years of tenure and thus lower X salaries.

# **Department of Clinical Pharmacy (CP)**

Table 17. Unadjusted Median Salary X+Y (\$1,000s) by Gender Status

	Median					
Gender/CP	X+Y	Ν				
Female	143	25				
Male	141	13				

 Table 17.1
 Unadjusted Median Salary Y (\$1,000s) by Gender Status

Gender/CP	Median Y	Ν
Female	13	25
Male	15	13

**Table 18.** Unadjusted Presence of Z (Proportion) by Gender Status

	Presence							
Gender/CP	of Z	Ν						
Female	0.36	25						
Male	0.31	13						

Table 19. Unadjusted Median Z Pay (\$1,000s) , if Present by Gender Status

Gender/CP	Median Z	Ν
Female	3	9
Male	3	4

**Table 20.** Unadjusted Presence of Acceleration (Proportion) by Gender Status

Gender/CP	Accel	Ν
Female	0.02	50
Male	0.04	26

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

Table 21. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Rank

СР	Female		Male	Female/Male	
Rank	Median	Ν	Median	Ν	Ratio
Assistant	121	4		0	
Associate	137	4	130	6	1.05
Full	164	17	162	7	1.01

Table 21.1 Unadjusted Median Y Pay (\$1,000s) and Pay Ratios by Gender by Rank

СР	Female		Male	Female/Male	
Rank	Median	Ν	Median	Ν	Ratio
Assistant	24	4		0	
Associate	24	4	15	6	1.55
Full	6	17	14	7	0.45

**Table 22.** Unadjusted Presence of Z (Proportion) and Ratios by Gender by Rank

СР	Female		Male		Female/Male	
Rank	Z	Ν	Z	Ν	Ratio	
Assistant	0.00	4	0.00	0		
Associate	0.00	4	0.00	6		
Full	0.53	17	0.57	7	0.93	

Table 23. Unadjusted Median Z (\$1,000s) and Pay Ratios, if Present, by Gender by Rank

СР	Female		Male		Female/Male
Rank	Median	Ν	Median	Ν	Ratio
Assistant		0		0	
Associate		0		0	
Full	3	9	3	4	1.00

**Table 24.** Unadjusted Presence of Acceleration and Ratios by Gender by Rank

СР	Female		Male		Female/Male
Rank	Accel	Ν	Accel	Ν	Ratio
Assistant	0.00	8	0.00	0	
Associate	0.00	8	0.00	12	
Full	0.03	34	0.07	14	0.41

5	5 ()	,	, ,		, , , , , , , , , , , , , , , , , , ,	
СР	Female		Male		Female/Male	
Doctorate Type	Median	Ν	Median	Ν	Ratio	
None	176	1		0		
Research	146	6	119	1	1.22	
Clinical	142	17	144	12	0.98	

0

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Table 25. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Doctorate Type

 Table 25.1 Unadjusted Median Y Pay (\$1,000s) and Pay Ratios by Gender by Doctorate Type

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СР	Female		Male		Female/Male
Doctorate Type	Median	Ν	Median	Ν	Ratio
None	30	1		0	
Research	10	6		1	
Clinical	13	17	15	12	0.88
Both	24	1		0	

Table 26. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Doctorate Type

СР	Female		Male		Female/Male
Doctorate Type	Z	Ν	Z	Ν	Ratio
None	0.00	1	0.00	0	
Research	0.50	6	0.00	1	
Clinical	0.35	17	0.33	12	1.06
Both	0.00	1	0.00	0	

**Table 27.** Unadjusted Median Z Pay (\$1,000s) and Pay Ratios, if Present, by Gender by Doctorate Type

СР	Female	Male	)	Female/Male	
Doctorate Type	Median	Ν	Median	Ν	Ratio
None		0		0	
Research	3	3		0	
Clinical	3	6	3	4	1.00
Both		0		0	

### Table 28.

Both

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

СР	Female		Male	9	Female/Male
Doctorate Type	Accel	Ν	Accel	Ν	Ratio
None	0.00	2	0.00	0	
Research	0.08	12	0.00	2	
Clinical	0.00	34	0.04	24	
Both	0.00	2	0.00	0	

Table 29. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Series

CP	Fomalo		Male		E a vez e la /M e la	
OF	I emale		Iviale	7	Female/Iviale	
Series	Median	Ν	Median	Ν	Ratio	
Adjunct	157	2	126	2	1.24	
Clinical X	145	11	141	9	1.03	
HS Clinical	134	7	182	2	0.74	
In Residence	170	3		0		
Ladder Rank	189	2		0		

 Table 29.1 Unadjusted Median Y Pay (\$1,000s) and Pay Ratios by Gender by Series

СР	Female		Male		Female/Male
Series	Median	Ν	Median	Ν	Ratio
Adjunct	15	2	7	2	2.21
Clinical X	13	11	15	9	0.89
HS Clinical	13	7	28	2	0.47
In Residence	27	3		0	
Ladder Rank	13	2		0	

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

СР	Female		Male		Female/Male
Series	Z	Ν	Z	Ν	Ratio
Adjunct	0.00	2	0.00	2	
Clinical X	0.55	11	0.22	9	2.45
HS Clinical	0.00	7	1.00	2	
In Residence	0.33	3		0	
Ladder Rank	1.00	2	0.00	0	

СР	Female		Male		Female/Male
Series	Median	Ν	Median	Ν	Ratio
Adjunct		0		0	
Clinical X	4	6	2	2	2.00
HS Clinical		0	4	2	
In Residence	2	1		0	
Ladder Rank	2	2		0	

Table 32. Unadjusted Presence of Acceleration	(Proportion) and Ratios by	Gender by Series
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СР	Female	)	Male		Female/Male
Series	Accel	Ν	Accel	Ν	Ratio
Adjunct	0.00	4	0.00	4	
Clinical X	0.00	22	0.06	18	
HS Clinical	0.00	14	0.00	4	
In Residence	0.00	6		0	
Ladder Rank	0.25	4		0	

СР	Female		Male		Female/Male
Series	Median	Ν	Median	Ν	Ratio
Adjunct					
Full	157	2		0	
Associate		0	126	2	
Clinical X					
Full	157	8	159	5	0.98
Associate		0	130	4	
Assistant	121	3		0	
HS Clinical					
Full	143	3	182	2	0.78
Associate	134	3		0	
Assistant	134	1		0	

 Table 33. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Series, Rank

Department Explanation:

There is a slight imbalance (both in favor of female and male depending on the rank and series) in the y-factor is noted. An important piece to keep in mind is that the sample sizes in some of the drill downs are very small (e.g., for the adjunct faculty, I currently have 3—one of the adjunct faculty is retiring June 2015). What the y-factor analysis reflects is that more recent hires in CP have a larger y-factor. This has been done in order to stay somewhat competitive with other entities (e.g., Kaiser) in order to recruit junior faculty. Another key factor that significantly plays into a faculty member's y-factor is their performance (e.g., ability to bring in extramural funding or provide significant service to the department in other ways such as committee work and teaching).

In reviewing the y-factors, (Table 29.1), for adjunct faculty, an imbalance for females is shown; one faculty member came to the Department from the School of Medicine—her y-factor has reduced over the years. For the HS clinical faculty, an imbalance for males is noted; this is reflective that of the 9 HS clinical faculty, two of the senior HS faculty are men in leadership positions. For the Clin X faculty, there is a slight male preference. This is reflective of our more recent hires (including those now at the Associate level). Finally, in the research series (table 25), an imbalance for females is noted; this is a faculty member in the In Residence series who is a physician (who came to us from the School of Medicine), and therefore has a higher y-factor.

In reviewing the z-payments (tables 30 & 31), there is an imbalance to women. This reflects the female faculty in the department who hold leadership positions (Vice Chairs, Associate Deans, Vice Dean and Chair) and have administrative stipends.

# **Department of Pharmaceutical Chemistry (PC)**

Table 17. Unadjusted Median Salary X+Y (\$1,000s) by Gender Status

Gender/PC	Median X+Y	Ν
Female	147	3
Male	168	15

Table 17.1 Unadjusted Median Salary Y (\$1,000s) by Gender Status

Gender/PC	Median Y	Ν
Female	10	3
Male	30	15

#### Table 18. Unadjusted Presence of Z (Proportion) by Gender Status

Gender/PC	Presence of Z	Ν
Female	0.33	3
Male	0.27	15

Table 19. Unadjusted Median Z Pay (\$1,000s), if Present by Gender Status

Gender/PC	Median Z	Ν
Female	2	1
Male	4	4

Table 20. Unadjusted Presence of Acceleration (Proportion) by Gender Status

Gender/PC	Accel	Ν
Female	0.00	6
Male	0.07	30

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

Table 21. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Rank

PC	Female		Ма	ale	Female/Male
Rank	Median	Ν	Median	Ν	Ratio
Assistant	0		130	3	
Associate	157	2	158	4	1.00
Full	147	1	264	8	0.55

 Table 21.1 Unadjusted Median Y Pay (\$1,000s) and Pay Ratios by Gender by Rank

PC	Female		Ма	ale	Female/Male
Rank	Median	Ν	Median	Ν	Ratio
Assistant		0	27	3	
Associate	33	2	39	4	0.85
Full	0	1	28	8	

**Table 22.** Unadjusted Presence of Z (Proportion) and Ratios by Gender by Rank

PC	Female		Ма	ale	Female/Male
Rank	Z	Ν	Z	Ν	Ratio
Assistant		0	0.00	3	
Associate	0.00	2	0.25	4	
Full	1.00	1	0.38	8	2.67

Table 23. Unadjusted Median Z (\$1,000s) and Pay Ratios, if Present, by Gender by Rank

PC	Female		Ма	ale	Female/Male
Rank	Median	Ν	Median	Ν	Ratio
Assistant		0		0	
Associate		0	2	1	
Full	2	1	6	3	0.33

Table 24. Unadjusted Presence of Acceleration and Ratios by Gender by Rank

PC	Female		Ма	le	Female/Male
Rank	Accel	Ν	Accel	Ν	Ratio
Assistant		0	0.00	6	
Associate	0.00	4	0.00	8	
Full	0.00	2	0.13	16	
*Note: N represents two year's					

#### Table 25. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Doctorate Type

PC	Female		Ма	ale	Female/Male
Doctorate Type	Median	Ν	Median	Ν	Ratio
None		0		0	
Research	147	3	168	15	0.87
Clinical		0		0	
Both		0		0	

#### Table 25.1 Unadjusted Median Y Pay (\$1,000s) and Pay Ratios by Gender by Doctorate Type

PC	Female		Ma	ale	Female/Male
Doctorate Type	Median	Ν	Median	Ν	Ratio
None		0		0	
Research	10	3	30	15	0.34
Clinical		0		0	
Both		0		0	

#### Table 26. Unadjusted Presence of Z (Proportion) and Ratios by Gender by Doctorate Type

PC	Female		Ма	ale	Female/Male
Doctorate Type	Z	Ν	Z	Ν	Ratio
None		0		0	
Research	0.33	3	0.27	15	1.25
Clinical		0		0	
Both		0		0	

#### Table 27. Unadjusted Median Z Pay (\$1,000s) and Pay Ratios, if Present, by Gender by Doctorate Type

PC	Female		Ma	ale	Female/Male
Doctorate Type	Median	Ν	Median	Ν	Ratio
None		0		0	
Research	2	1	4	4	0.50
Clinical		0		0	
Both		0		0	

Table 28.

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

PC	Female			Female/Male	
Doctorate Type	Accel	Ν	Accel	Ν	Ratio
None		0	0.00		
Research	0.00	6	0.07	30	
Clinical		0		0	
Both		0		0	

PC	Fema	ale		Male	Female/Male
Series	Median	N	Median	Ν	Ratio
Adjunct	168	1	157	2	1.07
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0	155	2	
Ladder Rank	147	2	240	11	0.61

Table 29. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Series

Table 29.1 Unadjusted Median Y Pa	ay (\$1,000s) and Pa	y Ratios by Gender by	y Series
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PC	Fema	ale		Male	Female/Male
Series	Median	N	Median	Ν	Ratio
Adjunct	55	1	28	2	2.00
Clinical X		0		0	
HS Clinical		0		0	
In Residence	0	0	39	2	0.00
Ladder Rank	5	2	29	11	0.17

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

PC	Fema	le		Male	Female/Male
Series	Z	Ν	Z	Ν	Ratio
Adjunct	0.00	1	0.00	2	
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0	0.00	2	
Ladder Rank	0.50	2	0.36	11	1.38

Table 31. Unadjusted Median	z Pay (\$1,000s) and Pay Ratios,	if Present, by Gender by Series
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PC	Fema	ale		Male	Female/Male
Series	Median	N	Median	Ν	Ratio
Adjunct		0		0	
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0		0	
Ladder Rank	2	1	4	4	0.50

**Table 32.** Unadjusted Presence of Acceleration (Proportion) and Ratios by Gender by Series

PC	Fema	ale	М	ale	Female/Male
Series	Accel	N	Accel	N	Ratio
Adjunct	0.00	2	0.00	4	
Clinical X		0		0	
HS Clinical		0		0	
In Residence		0	0.00	4	
Ladder Rank	0.00	4	0.09	22	

PC	Fema	ale	Male		Female/Male
Series	Median	Ν	Median	N	Ratio
Ladder Rank					
Full	147	1	267	7	0.55
Associate	147	1	158	1	0.93
Assistant		0	130	3	
Adjunct					
Full		0	147	1	
Associate	168	1	157	2	1.07

 Table 33. Unadjusted Median X+Y Pay (\$1,000s) and Pay Ratios by Gender by Series, Rank

## **Explanation:**

## Inequity in Y Factor by Gender

The salary equity analysis shows inequity in the unadjusted Median Y Salary in the department of Pharmaceutical Chemistry. In the Full Professor Level of the Ladder Rank Series, male faculty members have higher combined pay than female faculty members. Contrary to the Adjunct Series, female faculty has a higher combined pay and Y Factor than male Adjunct faculty. By examining across rank by series, the Female/Male Ratio for unadjusted median X+Y pay and pay ratios by gender and series (Table 29) is 1.07 in the Adjunct Series and 0.61 in for Ladder Rank faculty. Table 33 "Unadjusted Median X+Y Pay and Pay Ratio by Gender by Series, Rank" shows the Female to Male Ratio of 0.55 for Full Professor, Ladder Rank. The disparity is further shown in the data Table 29.1 "Unadjusted Median Y Pay and Pay Ratios by Gender by Series" in which Female/Male Ratio of the Ladder Rank series is 0.17.

The underlying reason for the disparity in "Y" between male and female faculty in the department is a corresponding disparity in the sponsored research (grant) revenue between male and female faculty in the department. The negotiated salary is not guaranteed to any faculty and the funding source is nearly solely supported by the faculty member's own research grants. The ability to meet the department's compensation plan (comp plan) goal is the key factor in salary level setting. The individual goal for each faculty member varies by rank and series (Appendix A). Revenue calculation is based on the effort level each Principal Investigator (PI) contributes across his or her federal, non-federal and department funding sources. PIs who do not meet his or her comp plan goal over a period of time are reduced to base salary at the scale of the comp plan. In FY14, 16 faculty members of all ranks and series participated in the Pharmaceutical Chemistry compensation plan. 10 out of 16 members met the TDC goal of all gender and rank, and it was female members for 1 out of 3 (Appendix B).

Professor	1.25
Associate Professor	1.15
Assistant Professor	
Step 5	0.50
In Residence	0.95

### Appendix A – Total Department Contribution (TDC) Target Goal by Rank and Series

# Appendix B – Faculty Salary Support by C&G Funding by Gender, By Rank, By Series

- In FY 14, the average ladder rank faculty effort paid from sponsored research was 35%. Adjunct has to fund 100% by C&G.
- Breakdown by rank for ladder rank faculty:
  - Full 45% (49% Male, 17% Female); Male > Female
  - Associate 12% (21% Male, 3% Female); Male > Female
  - Assistant 42% (42% Male, N/A Female),
  - Adjunct 100% (100% Male, 100% Female)
- Average number of contracts and grants of faculty by rank by gender by series:
  - Full 6 (Male 6.3; Female 4) Male > Female
  - Associate 1.5 (Male 2, Female 1) Male > Female
  - Assistant 4.3 (Male 4.3, Female N/A)
  - Adjunct 10.33 (Male 10, Female 15) Male < Female

## Other data points for background reference

- A female was promoted from Adjunct Series to In-Residence Series in January 2014. A male was promoted at the same time. They are both Associate Directors to the SMDC with the same level of authority. They are paid at the exact same level, both with a large "Y" factor.
- Pharm Chem has recruited 2 Full Ladder Rank Professors in 2014. A female and a male who are paid at the exact same level with a large "Y" factor.
- Assistant Professors, a male and a female who were recruited to UCSF at the same time, have salaries set at the same level.
- Recruitments in the department are often done jointly with another department or organized research unit (ORU) in which the salary negotiation is not completely under the department's control. However, equity and parity between School of Medicine and School of Pharmacy and between departments are always kept in consideration.
- A new female Adjunct Full Professor is joining Pharm Chem in July 2015.
- "Z" factors are given to Chairs, Vice Dean, and Vice Chairs department and school-wide administrative responsibilities.

## School of Nursing Faculty Salary Equity Report and Action Plan

July 1, 2015

Shari L. Dworkin, Ph.D., M.S. Associate Dean for Academic Affairs

## **Overview:**

In 2012, then UC President Mark Yudof charged each UC campus with completing a faculty salary equity study by January 2015. UCSF formed a faculty salary equity committee and the committee was charged with completing the study. The committee charge was met by that deadline and results showed (1) no evidence of a salary imbalance by under-represented minority status in salary (X+Y), the presence and amount of clinical incentives (Z), and no evidence of difference between URM and non-URM faculty in the presence of an accelerated advancement; (2) a statistically significant imbalance in salary (X+Y) with women receiving 3 percent lower salaries compared to men; (3) No statistically significant imbalance by gender in the presence or absence of a clinical Z payment; (4) Among those who received a Z payment, there was a statistically significant imbalance found in Z by gender, with women receiving 29% lower Z compared to men; (5) no statistically significant difference by gender with respect to the presence of accelerated academic advancements.

On February 2, 2015, Chancellor Hawgood charged each school at UCSF with replicating the campus-level faculty salary equity study, with a suggestion to draw on the same methodology and analysis used in the institutional level study. The Chancellor stated that implementation and action plans at the school-level are the most effective way to identify any inequities. The Chancellor made clear that the salary equity committee recommends the use of the term "imbalance" to describe a statistically significant difference in groups as one cannot define the imbalance as an inequity unless further analysis is done to determine the cause. If such differences cannot be explained by non-discriminatory organizational practices, then such a difference may be indicative of inequity.

# UCSF SCHOOL OF NURSING-LEVEL FACULTY SALARY EQUITY REPORT

## Purpose

The purpose of the analysis was to determine the presence and size of imbalance in faculty salary and accelerated academic advancement by race/ethnicity and gender within the School of Nursing.

# **Analysis Plan**

The analysis of the School of Nursing (SON) data followed the analysis plan of the overall UCSF 2014 Faculty Salary Equity Review (FSER).

Race/ethnicity was recoded into a variable of underrepresented minority (URM) versus (vs) non-URM. URM was defined as those who identified as Black or African American, Hispanic, Native American/Alaskan Native, Filipino, or Hawaiian/Pacific Islander. Non-URM was defined as those who identified as White, Asian, or declined to state.

Gender was coded as female or male.

The data specific to the SON was provided by Office of Academic Affairs, UCSF Human Resources.

The SON had 75 faculty members (in the broader campus report, faculty members were included who were greater than or equal to 75% time-SON followed the definition used within the broader campus analysis) who were included in the overall UCSF FSER. Sixty-five (87%) were female and 10 (13%) were male. Nine (12%) were URM and 66 (88%) were Non-URM.

Annual salary rates (X+Y) were obtained on July 1, 2014. Salary amounts (X+Y or Z) were adjusted to full-time status by dividing by the percent effort of appointment. Salary amounts (X+Y or Z) were log transformed to reduce the possible influence of a very few high salaries and to provide interpretations in terms of percent differences in median salaries. Although there weren't any extreme salaries in the SON data, log transformed data were used in the SON analyses as well, in order to be comparable to the overall UCSF FSER analyses.

Z payment data represents the total Z payments received between July 1, 2013 and June 30, 2014. Z payments were analyzed by comparing the likelihood of receiving *any* Z payment between the genders and the two URM groups.

The primary analyses were carried out through regression approaches.

Multiple linear regression analyses were conducted to test for URM vs non-URM and female vs male imbalances in the log transformed salary amounts (X+Y). 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) and 95% CI. The covariates that were included in the adjusted models were 1) Step, 2) Rank: Professor, Associate, or Assistant, 3) Doctorate type: Clinical, Research, Both, or Other, 4) Series: Ladder rank or in Residence, Clinical X or HS Clinical, or Adjunct, and 5) Department: Community Health Systems (CHS), Family Health Care Nursing (FHCN), Physiological Nursing (PN), and Social and Behavioral Sciences (SBS).

The presence of a Z payment or presence of an accelerated advancement was first examined with Chi-square test of proportions and the Fisher Exact test and then was modeled with binomial logistic regression if appropriate.

Although the acceleration data spanned two years and had two observations per faculty member in the overall UCSF FSER analyses, no SON faculty member was accelerated in more than one year. Consequently, acceleration (yes or no) was analyzed for the 75 independent observations.

# Results

It should be noted that the relatively small total sample size of SON faculty (75) and the small percentage of males (13%) or URM (12%) does not provide much power to detect statistically significant (p < .05) differences between males and females or between URMs and non-URMs unless the effects were relatively large.

# Salary and Acceleration by Gender Status

Both the unadjusted and the adjusted analyses controlling for step, rank, doctorate, series, and department did not indicate the presence of a statistically significant female vs male imbalance in X + Y salary (See Table 1).

The unadjusted female/male RR of median X+Y salaries was 1.10 (Cl 0.92, 1.31). After adjustment, the aRR of median X + Y salaries was 0.97 (Cl 0.89, 1.05). Although not statistically significant (p = 0.42), the sample ratio is the same as the ratio found in the overall FSER analyses. Only step and rank were statistically significant independent variables in the multiple linear regression analysis. As step went up salary went up. Assistant Professors made less salary than Associate Professors and Associate Professors made less salary than Full Professors.

None of the 10 male SON faculty members (0%) had a Z payment. Eleven of the 65 female faculty members (16.9%) had a Z payment. The difference between these two proportions was not statistically significant (two-tailed Fisher Exact p = 0.34). The lack of any males having a Z payment made the calculation of an odds ratio and using binomial logistic regression to get an adjusted ratio statistically inappropriate.

None of the 10 male SON faculty members (0%) had an accelerated merit or promotion. Eleven of the 65 female faculty members (16.9%) had an accelerated merit or promotion . The difference between these two proportions was not statistically significant (two-tailed Fisher Exact p = 0.34). The lack of any males having an accelerated merit or promotion made the calculation of an odds ratio and using binomial logistic regression to get an adjusted ratio statistically inappropriate.

Of the 11 female faculty members who had a Z payment, 6 (55%) also had an accelerated merit or promotion.

Table 1 Female/Male X+Y Pay Ratio

<b>,</b> ,	Ratio	95% Confidence Interval
Unadjusted	1.10	(0.92, 1.31)
Fully Adjusted	0.97	(0.89, 1.05)

# Salary and Acceleration by URM Status

Both the unadjusted and the adjusted analyses controlling for step, rank, doctorate, series, and department did not indicate the presence of a statistically significant URM vs Non-URM imbalance in X + Y salary (See Table 2).

The unadjusted URM/Non-URM RR of median X+Y salaries was 0.88 (CI 0.74, 1.06). After adjustment, the aRR of median X + Y salaries was 0.93 (CI 0.86, 1.01). Although not statistically significant (p = 0.07), the sample ratio is lower than the ratio found in the overall FSER analyses. Only step and rank were statistically significant independent variables in the multiple linear regression analysis. As step went up salary went up. Assistant Professors made less salary than Associate Professors and Associate Professors made less salary than Full Professors.

One of the 9 URM SON faculty members (11.1%) had a Z payment. Ten of the 66 Non-URM faculty members (15.2%) had a Z payment. The difference between these two proportions was not statistically significant (two-tailed Fisher Exact p = 1.00). The unadjusted odds ratio was 0.70 (CI 0.08, 6.22). After controlling for step, rank, doctorate, series, and department, the adjusted odds ratio was 1.19 (CI 0.10, 14.48). See Table 3.

The extremely small sample of 1 URM SON faculty member and 10 Non-URM SON faculty members who had any Z payment made comparison of the amount of Z pay between the two groups statistically inappropriate.

Two of the 9 URM SON faculty members (22.2%) had an accelerated merit or promotion. Nine of the 66 Non-URM faculty members (13.6%) had an accelerated merit or promotion. The difference between these two proportions was not statistically significant (two-tailed Fisher Exact p = 0.61). The unadjusted and adjusted odds ratios were not statistically significant (p = 0.50 and p = 0.17 respectively) The unadjusted odds ratio was 1.81 (CI 0.32, 10.12). After controlling for step, rank, doctorate, series, and department, the adjusted odds ratio was 4.84 (CI 0.50, 46.86). See Table 4.

## Table 2 URM/Non-URM X+Y Pay Ratio

	Ratio	95% Confidence Interval
Unadjusted	0.88	(0.77, 1.06)
Fully Adjusted	0.93	(0.86, 1.01)

# Table 3

## URM/Non-URM Presence of Z

	Ratio	95% Confidence Interval
Unadjusted	0.70	(0.08, 6.22)
Fully Adjusted	1.19	(0.10, 14.48)

# Table 4

URM/Non-URM Presence of Accelerated Merit or Promotion

	Ratio	95% Confidence Interval			
Unadjusted	1.81	(0.32, 10.12)			
Fully Adjusted	4.84	(0.50, 46.86)			

# Summary and Conclusions

**In the School of Nursing, we found** (1) no evidence of a salary imbalance by underrepresented minority status in salary (X+Y), the presence and amount of clinical incentives (*Z*), and no evidence of difference between URM and non-URM faculty in the presence of an accelerated advancement. However, despite finding no statistically significant imbalance in salary (X+Y) between URM and non-URM, we found a trend whereby URM received 7% lower salaries compared to non-URM controlling for covariates (2) no statistically significant imbalance in salary (X+Y) by gender. However, despite finding no statistically significant imbalance, we found a trend whereby women received 3 percent lower salaries (X+Y) compared to men controlling for all covariates (this result is the same as the overall UCSF campus level analysis); (3) No statistically significant imbalance by gender in the presence or absence of a clinical Z payment; (4) no statistically significant difference by gender with respect to the presence of accelerated academic advancements.

Because males make up only 13% of the 75 faculty in this sample and URM constitute 12% of the faculty in this sample, we do not have adequate power to determine statistically significant differences between groups, unless the effects are relatively large.

# **Action Plans**

- The School of Nursing needs to invest in a Diversity Initiative in order to increase its critical mass of faculty of color, particularly from under-represented minority groups. We recognize that diversifying the faculty does not guarantee that they will be paid equitably and thus we are committed to monitoring salary equity in the School over time and making action plans to rectify any imbalances that are deemed inequitable.
- 2. Specifically, the School of Nursing will re-run the salary equity analysis every two years in order to ascertain whether the trends found above become statistically significant if the sample sizes increase to the point where we can detect differences between groups.
- 3. Should the SON find statistically significant imbalances in any of the outcomes in the previously run analyses once these are re-run in future years, a faculty subcommittee will be formed to determine the cause of the imbalance (e.g., workload differences, grantsmanship productivity, inequity in pay).
- If future SON analyses and sub-committee reports uncover an inequity by gender or URM status, the School will determine a plan to rectify salary, acceleration, or Z payment imbalances.

# Acknowledgments

The School of Nursing is grateful to Dr. Steven Paul who replicated the methodology found in the campus-level report for the School-level analysis. He ran the statistical analyses and led the writing of the results section. The School of Nursing is grateful to the salary equity faculty subcommittee who commented on this report and contributed to the action plans. The subcommittee included the Chair of the Faculty Council in the School of Nursing.

# FSER Committee Meeting- 11/9/2015—follow up 11/13/2015

**UCSF School of Nursing** 

Associate Dean for Academic Affairs, Shari L. Dworkin, Ph.D., M.S. Re: Post-hoc matched pair analyses and recommendations

## URM analysis:

- 1. Despite non-significant differences in salary between URM and non URM in SON, trend showed URM earned 7% less than non URM faculty
- 2. Matched pair analysis was carried out with 8 URM faculty
- 3. Pairs were matched on rank, step, and series
- 4. Where more than 1 perfect match was found, salaries were averaged
- 5. **Five URM faculty made less than non-URM in the matched pairs** (2 URM made more than non URM match and 1 URM made the same as non URM match)
- 6. These faculty are from 4 different departments so no evidence of a particular department having a higher distribution of URM faculty making a lower salary

**CASE 1:** HSCP URM Faculty member made 14K less than non URM match

## Reason for difference: Y factor

**Conclusion**: The salary difference was due to regular business practices and not equity related reasons, although see below (faculty member felt clinical faculty were not paid fairly in HSCP)

**Update:** Faculty has left the HSCP due to salary and works as a full time clinician now.

**CASE 2**: Ladder rank URM faculty member makes 10K less than NON URM matches.

**Reason for difference**: Faculty had a lower APU than the other matches due to lower workload and no Y factor due to a lack of grant funds.

**Conclusion**: The salary difference was due to regular business practices and not equity related reasons

**Update:** This faculty member now makes 20K more in 2015 than when FSER data was examined

**Case 3**: Adjunct URM faculty member makes \$27,000 less than average of matches who are non-URM. Matching is quite subjective here as one of the matches is nearly the highest producer of grants in the school. For the

remaining case which is also a perfect match, the faculty member makes \$12,300 less than match. See update for 2015 below.

**Reason for difference**: Y factor/grant money. Faculty member is in a transition period with less grant funding for just this year.

**Update:** 2015 salary went up by 10K and 2016 salary will go up 18K more in given brand new grants have come in. The FSER survey captured a lower level of grant support for this faculty member at that point in time.

**Conclusion**: The salary difference was due to regular business practices and not equity related logics.

**Case 4:** HSCP faculty member who is URM who makes 14K less than non URM match, but we cannot find an appropriate match. Match is one step above this faculty member (this accounts for 4 K of the difference). The rest of the difference (10K) is in APU. We pulled the APU worksheets, and there are workload differences that justify the APU difference.

**Conclusion**: The salary difference was due to regular business practices and not equity related reasons

**Case 5:** Ladder rank faculty member who is URM makes \$15,850 more than Non URM matches

**Reason for difference:** This is a Department Chair who earns a stipend.

**Conclusion**: Normal business practices.

**Case 6:** HSCP URM faculty makes \$8067 more than matched non-URM faculty

Reason for difference: APU/workload

Conclusion: APU /workload justifies the difference

Case 7: URM ladder rank faculty makes 9K more than non URM match

Conclusion: Y factor/grant \$ justifies this difference

**Case 8:** HSCP faculty member (URM) makes 7K less than match

Reason for difference: APU/workload

**Conclusion:** APU justifies the difference according to workload—regular business practices

**Overall:** We do not recommend any salary adjustments at the VPAA/the Chancellor's office concerning URM/non URM differences in SON

## Gender analysis: Women and Men

- 1. Despite non-significant differences in our salary analysis between women and men in SON, a trend showed that women make 3% less than male faculty members
- 2. Matched pair analysis was carried out with 9 men (1 male left the school, N was 10 before his departure)
- 3. Pairs were matched on rank, step, and series
- 4. Where more than 1 perfect match was found, we averaged the salaries of the matches
- 5. **6 of 9 men made more than their matched women faculty** (2 made less than matched women faculty and 1 male made the same amount as matched woman faculty)
- 6. On average among the matched pairs—men made 6% more than their matched women faculty
- 7. These faculty are from 4 different departments--so no evidence of a particular department having a higher distribution of women faculty making a lower salary

**Case 1:** Adjunct female faculty member makes 2K less than male match **Reason for difference**: Grant money/Y

**Conclusion**: The salary difference was due to regular business practices and not equity related reasons

**Case 2**: Ladder rank female faculty member makes 9K less than male match **Reason for difference:** Grant money/Y

**Conclusion**: The salary difference was due to regular business practices and not equity related reasons

**Case 3:** Ladder rank female faculty member makes 57K less than male match **Reason for difference:** Grant money/Y

**Conclusion**: The salary difference was due to regular business practices and not equity related reasons

**Case 4:** Adjunct female makes 20K less than male match

**Reason**: There is no perfect match and thus we matched a male one step lower--this male has a higher Y than his match despite his lower X and thus X+Y is higher for the male faculty member. There is no male match one step higher. In addition, the male match had a higher APU than his matched female. APU worksheets were reviewed and the different workload justifies the higher APU. **Conclusion**: The salary difference was due to regular business practices and not equity related reasons

**Case 5:** Ladder rank female makes 12K less than male matches **Reason for difference:** Grant money/Y

**Conclusion**: The salary difference was due to regular business practices and not equity related reasons

**Case 6:** HS Clinical female faculty member makes 6K less than male match, but there is no perfect match. We thus used males one step lower for the match. This female is a step lower than male match and makes 6 k less than male match. X's are quite similar and Y is higher among the male faculty member.

#### **Reason for difference: Y factor**

**Conclusion**: The salary difference was due to regular business practices and not equity related reasons

**Case 7:** Ladder rank male faculty member makes 12K more than female matches

#### Reason for difference: Y/Grant \$\$

**Conclusion:** The salary difference was due to regular business practices and not equity related reasons

**Case 8:** Ladder rank faculty member makes the same amount of money as matched female

**Conclusion**: There is no difference in salary. No imbalance or inequity.

# Case 9: Adjunct male faculty members makes 20K more than female matches

## Reason for difference: Y factor/grant %

**Conclusion:** The salary difference was due to regular business practices and not equity related reasons

**Overall:** No salary adjustments are recommended to VPAA/the Chancellor's office concerning male/female differences in SON

**Communication plan**: 1) Associate Dean Dworkin will present new analyses at Nov 13 2015 Full Faculty meeting 2) a paragraph will be added to the original FSER report and 3) a new/updated version of the FSER report will be posted to the Faculty Council website in SON, with a note to all faculty informing them of these results and the location of the report

## School of Dentistry (UCSF) Faculty Salary Equity Review, 2015

### Introduction

In 2012, UC President Yudof charged the Campus to implement a faculty salary equity study. UCSF Vice Provost Brian Alldredge convened a committee to conduct the campus-wide review.

The variables measured were:

- Base salary (X)
- Negotiated salary (Y)
- Salary from clinical incentives (Z)
- Accelerated academic advancements

The covariates were:

- Series
- Rank
- Step
- Doctorate type
- Department

Comparisons were made between:

- URM vs Non-URM status
- Gender

The findings of the Campus Committee were:

#### URM vs Non-URM:

No evidence of imbalance by URM status was found in total salary presence and amount of clinical incentives or accelerated academic advancements

#### Female vs Male:

- A statistical imbalance in salary was found, with females receiving 3% lower total salaries compared to males.
- There was no statistically significant imbalance in the presence of clinical incentives by gender. However when a clinical incentive was received, females received a lower clinical incentive payment (29%) compared to males.
- There was no significant gender difference related to accelerated academic advancement.

**Charge:** The Dean of each of the campus schools was directed to create a school specific action plan, which must include a response to the camps wide finding of salary imbalance by gender and must propose strategies to address inequities if found. The schools should analyze data from this report and generate "residuals", i.e., the difference between the model-based prediction and the actual salary (to identify under- and over-paid faculty, based on what would be predicted). Schools may choose to analyze data at level of departments.

- If the school analysis finds an imbalance, the school must determine if the salary differences can be attributed to non-discriminatory legitimate business practices of the University or campus unit. Each action plan should respond to the campus wide findings of salary imbalance by gender.
- The school-specific action plans must include specific strategies to address inequities that are found. If the school-level analysis finds no evidence of inequity, the responding action plan needs to include a justification for this finding.
- The action plan must include specific timeframes for addressing inequities that are found
- The school's action plan is due July 2015.
- The schools will be provided with an updated data set in July of 2016.
- The schools will be expected to submit to the chancellor a progress report on their action plan by October 30, 2016.

# Methods For the UCSF School of Dentistry Analysis

The School of Dentistry analysis used the same raw data used to produce the campus report. Dr. Stuart Gansky, DrPH, performed the analyses. The same inclusion criteria were used, with the following demographics:

	Total Number	Assistant	Associate	Full	Accelerations	Z Factor Presence
URM	5	1	1	3	0	0
Non URM	68	15	20	33	5	14
Total	73	16	21	36	5	14

Table i: URM/Non-URM demographics by rank and presence of acceleration and Z factor

	Total Number	Assistant	Associate	Full	Accelerations	Z Factor Presence
Female	31	11	10	10	1	4
Male	42	5	11	26	4	12
Total	73	16	21	36	5	16

 Table ii: Gender demographics by rank and presence of acceleration and Z factor.

The School's analysis used multiple regression to account for fundamental differences between faculty before making female vs male comparisons. Three variables were studied:

- Total salary (X +Y)
- Presence and amount of salary from clinical incentives (Z)
- Frequency of accelerated academic advancements

Potential covariates used in the regression analysis were:

- Series
- Rank
- Step
- Doctorate type
- Department

Not all analyses could be fully adjusted for all covariates simulataneously due to the small sample size. This, sometimes, only partially adjusted analyses were possible.

As with the UC San Francisco campus-wide Committee, the term "imbalance" is used rather than "inequity" until such time as any salary differences between groups could not be explained by non-discriminatory legitimate business practices of the University or campus unit.

In addition to replicating the campuswide analyses at the school-level, the Peters-Belson (PB) method, which is frequently employed in salary discrimination cases, was also utilized to estimate the adjusted gender imbalance when significant differences were found. According to Jagsi *et al.* (Acad Med 2013), "This approach allows for the decomposition of an observed gender difference in salary into two components: the component that is explained by gender differences in other measured characteristics, and the component that remains unexplained. Specifically, we developed a regression model using all measured characteristics for the men alone. We then applied the coefficients from that model to the characteristics for each woman to derive her expected salary, as if her gender were male, in order to quantify the proportion of the observed gender difference unexplained by the measured characteristics." Adjustment variables were selected using best subsets regression to produce a parsimonious model and reduce potential overfitting; Akaike information criterion (AIC) and Mallow's C<sub>p</sub> were also used to check against model overfitting. The results from this additional analysis are presented in the appendix B.

## Results

Tables are numbered with the same numbers as the campus-wide report to permit easier comparison with that report; thus, the table numbers herein are intentionally not consecutive.

### **Total Salary**

It was not possible to provide any statistical methods on URM faculty, due to the low total number in this small school. The percentage of URM faculty was 7%

#### Table 6: Female/Male (X+Y) Pay Ratio

This table shows unadjusted, partially adjusted (for rank, step, and department) and fully adjusted (for series and degree type) results for median salary (X+Y).

Adjustment	Ratio	95% Confidence Interval
Unadjusted	0.77	(0.66, 0.89)
Partially Adjusted	0.92	(0.82, 1.03)
Fully Adjusted	0.94	(0.84, 1.05)

Partially adjusted included rank, step and department; fully adjusted added series and degree type.

The analysis summarized in Table 6 shows that X+Y pay, when partially adjusted or fully adjusted, was not significantly different between females and males. Because there was no statistically significant difference in X+Y, the PB method was not used for the X+Y comparison.

#### Presence and amount of salary from clinical incentives (Z)

#### Table 7: Female/Male Presence of Z Pay Ratio

This table shows unadjusted, partially adjusted and fully adjusted comparison of the proportion of females and males receiving a Z payment,

Adjustment	Ratio	95% Confidence Interval
Unadjusted	0.45	(0.16, 1.27)
Partially Adjusted	0.54	(0.19, 1.53)
Fully Adjusted		

Partially adjusted included rank, step and department; fully adjusted models adding series and degree type do not fit.

The analysis summarized in Table 7 shows there are no statistically significant differences between the proportion of females and males that receive Z payments in unadjusted and partially adjusted data. Full adjustment was not possible for our data set, since the sample size was not large enough to allow that many adjustment parameters. For the ensuing analysis, on the amount of Z payment, we therefore used partially adjusted data.

#### Table 8: Female/Male Z Pay Ratio

This table shows unadjusted, partially adjusted and fully adjusted comparison of the amount of Z payment received by females and males, when one was received,

Adjustment	Ratio	95% Confidence Interval
Unadjusted	0.25	(0.06, 0.99)
Partially Adjusted	0.29	(0.09, 0.94)
Fully Adjusted	0.04	(0.01, 0.21)

Partially adjusted included rank, step and department; fully adjusted added series and degree type.

The analysis summarized in Table 8 shows that among faculty who received Z payment, female faculty received significantly less Z payment than male faculty.

Appendix A, which follows the end of this report, contains additional tables with School of Dentistry data for various covariates as in the campuswide report.

Appendix B contains the data used in the Peters Belson method of comparison.

#### Frequency of accelerated academic advancements

Table 9 : Female/Male Incidence of Acceleration Ratio

Adjustment	Ratio	95% Confidence Interval
Unadjusted	0.34	0.01-3.04
Partially Adjusted		
Fully Adjusted		

Adjusted models of any kind do not fit

There were 5 total accelerations, 4 (9.5%) males and 1 (3.2%) female. The unadjusted rates are not significantly different and due to the small sample size no adjustments were possible. Because there was no statistically significant difference in accelerated advancements, the PB method was not used for accelerated advancements.

### Summary of UCSF School of Dentistry Results

The main findings from this 2015 UCSF School of Dentistry Faculty Salary Equity Review of gender imbalance are:

- It was not possible to show a difference in salary, accelerated actions and Z payments due to the low numbers of URM faculty
- Total Salary: Before adjustments for series, rank, step, department, and degree type, total salary (X + Y) showed a statistically significant imbalance between genders, with females receiving 23% lower salary compared to males. However, after adjustment for

rank, step, and department (partial adjustment) or after adjustment additionally for series and degree type (full adjustment), there was no statistically significant difference.

- Clinical incentives: The presence of salary from clinical incentives (Z) showed no statistically significant difference by gender. However, among faculty who received Z payment, female faculty received significantly less Z payment than male faculty. Using the Peters Belson method of assessment, the residual was \$17,769 (see appendix B) and this amount was not explained by the adjustment covariates (rank and Department).
- Accelerated academic advancements: There were only 5 accelerated academic advancements, 4 male and 1 female. The difference was not statistically significant (although the power was low), due to the small number of faculty.

#### Discussion

#### URM-Non URM differences

URM faculty at UCSF School of Dentistry represent only 7% of the faculty. This compares unfavorably with National and local demographics. There was no statistically significant difference in total salary, presence of acceleration or presence or amount of Z factor; it was not possible to create meaningful statistics on such a small number of faculty. It was noted, however, that none of the URM faculty received accelerated actions or Z payments. It was not possible to determine, statistically, whether this was a result of legitimate business practices or not.

#### Female-Male differences

Although there were no differences in total salary, accelerated actions and in the presence of Z payments, there were statistically significant differences in the amount of Z payments between Females and Males when they existed.

Are the gender imbalances in the size of Z payments for faculty receiving Z payments due to non-discriminatory legitimate business practices of the school or of units within the school? Alternatively, are they due to discriminatory practices?

Z payments to faculty in the School of Dentistry are provided to compensation plan participants who voluntarily participate in a group clinical practice in one of the following areas: Endodontics, Faculty Group Practice, Oral Surgery, Oral Pathology, Oral Medicine, Orthodontics, Pediatric Dentistry, Periodontics and Prosthodontics. Historically, some of these group practices (e.g., Oral and Maxillofacial surgery, OMFS, in the Division/Department of Oral and Maxillofacial Surgery, and Oral Pathology in the Department of Oro Facial Sciences, OFS) have had large revenue streams and their participants have had sizeable Z payments, while other group practices (e.g., Orthodontics, Pediatric Dentistry also in the Department of OFS) have been less fiscally prosperous. It seems possible that the imbalance in Z payments could be attributed to an imbalance in participation of female/male faculty in those Divisions with lucrative group practices.

Department	Presence of Z Payment Female (Total Female)	Presence of Z Payment Male (Total Male)
СТВ	0 (7)	1 (7)
OFS	0 (6)	1 (11)
OMFS	0 (0)	3 (6)
PRDS	4 (18)	7 (18)

#### Table iii Presence of Z payment by gender by Department (unadjusted)

The demographics by Division and Group Practice are not currently available, but will be obtained to further analyze gender differences by high-revenue-stream-Divisions. Our objective is to learn, first, whether the Z imbalance is correlated with divisional/group practice assignment and, second, whether divisional assignment is related to qualifications and training, which are legitimate and non-discriminatory, or whether it is based on potentially discriminatory practices such as biases in hiring.

#### **School of Dentistry Action Plan**

- The presence of URM faculty is extremely low in the School of Dentistry. To address this issue, the Dean of the School of Dentistry, John Featherstone, appointed an Associate Dean for Diversity and Inclusion, Dr. George Taylor, in July 2015. Dr. Taylor has already initiated efforts at the local level (e.g. Diversity and unconscious bias training for faculty, search committee members and staff) and at the national level (e.g. Increasing URM hiring efforts at national meetings) to increase the diversity and inclusion in faculty at UCSF School of Dentistry.
- 2. Further analysis of Z revenue by Division and Group Practice will be completed to explore whether there are significant differences in the total amount of Z revenue and in the Z payments per participating compensation plan member.
- 3. Further analysis of the proportion of female and male faculty in "rich" vs. "poor" Divisions will be completed to explore if there are gender differences by Division.
- 4. If there are Z revenue differences by Division and Group Practice type and if there are gender differences between "rich" and "poor" Divisions/Group Practices, then the following will be explored:
  - a. Is there a female/male imbalance in the pool of total applicants and the pool of qualified applicants for open faculty positions in "rich" as compared to "poor" divisions?
  - b. Is there a female/male difference in the frequency with which appointments in these divisions are made, when corrected for imbalances that may appear in the applicant pool?

- c. Is there a female/male difference in the extent to which faculty choose to modify their activities once they are appointed and where that choice results in a change in their Z payment? Do more women than men choose to modify their responsibilities such that they are likely to generate less Z payment (for example, do more women than men decide, after being appointed to an oral surgery service, that they need to devote more time to their family, thus taking themselves out of a high Z situation). What if the decision to modify one's activities is made not for family reasons but for "personal" reasons that are driven by a level of discomfort in the workplace that may haven been precipitated by hostility? These issues will be challenging to address, but we need to take this analysis where the data leads us.
- d. Would female faculty benefit from being provided with advice / training on negotiation?
- e. Would Division Chairs, Heads of Department, Associate Deans of Academic Affairs and members of CAP benefit from being provided advice/training on appropriate accelerated actions for those faculty who excel, but who have not negotiated for accelerated actions?
- 5. Are the accelerated actions taking place in a particular Division? What were the reasons for the accelerated actions?

We expect that this proposed analysis will take 3-6 months to complete.

We additionally plan to conduct a survey of female/male parameters and of URM/non-URM parameters following each campus review, which we expect to occur every 2-3 years.

## Appendix A

Table numbering matches that of the campus report.

Table 17: Unadjusted Median Salary X + Y (\$1,000s), by Gender Status

Female Median (X+Y) 1000s	Female sample size	Male Median (X+Y) 1000s	Male sample size	Female/Male Ratio of Median (X+Y)
139	31	188	42	0.74

Table 18: Unadjusted Presence of Z (Proportion) by Gender Status

Female Presence of Z	Female sample size	Male Presence of Z	Male sample size	Female/Male Ratio of Presence of Z
0.13	31	0.29	42	0.45

Table 19: Unadjusted Median Z Pay, if present, (\$1000s) by Gender Status

Female	Female Z	Male	Male Z pay	Female/Male
Median Z	pay sample	Median Z	sample	Ratio of
1000s	size	1000s	size	Median Z
10	4	20	12	0.50

## Table 21: Unadjusted Median X + Y (\$1000s) Pay and Pay Ratios by Gender by Rank

Rank	Female Median (X+Y) 1000s	Female sample size	Male Median (X+Y) 1000s	Male sample size	Female/Male Ratio of Median (X+Y)
Assistant	109	11	127	5	0.86
Associate	126	10	178	11	0.71
Full	193	10	195	26	0.99

Rank	Female Presence of Z	Female sample size	Male Presence of Z	Male sample size	Female/Male Ratio of Presence of Z
Assistant	0.09	11	0	5	•
Associate	0.20	10	0.36	11	0.55
Full	0.10	10	0.31	26	0.33

Table 22: Unadjusted Presence of Z (Proportion) and Ratios by Gender by Rank

Table 23: Unadjusted Median Z (\$1000s) and pay ratios, if Present, by Gender by Rank

Rank	Female Median Z 1000s	Female Z pay sample size	Male Median Z 1000s	Male Z pay sample size	Female/Mal e Ratio of Median Z
Assistant	29	1	-	0	-
Associate	5	2	91	4	0.06
Full	10	1	15	8	0.63

Table 24: Unadjusted Presence of Acceleration (Proportion) and Ratios by Gender by Rank

Rank	Female Accel	Female N	Male Accel	Male N	Female/Male Ratio
Assistant	0	11	0	5	
Associate	1	10	3	11	0.37
Full	0	10	1	26	
Unadjusted	1	31	4	42	0.34†

†Fisher's Exact p = 0.387

Degree Type	Female Median (X+Y) 1000s	Female sample size	Male Median (X+Y) 1000s	Male sampl e size	Female/Male Ratio of Median (X+Y)
Both	150	6	178	9	0.84
Clinical	128	11	194	22	0.66
Research	138	14	162	11	0.85

Table 25: Unadjusted Median X + Y (\$1000s) Pay and Pay Ratios by Gender by Doctorate Type

Table 26: Unadjusted Presence of Z (Proportion) and Ratios by Gender by Doctorate Type

Degree Type	Female Presenc e of Z	Female sample size	Male Presenc e of Z	Male sample size	Female/Male Ratio of Presence of Z
Both	0.17	6	0.11	9	1.50
Clinical	0.18	11	0.41	22	0.44
Research	0.07	14	0.18	11	0.39

Table 27: Unadjusted Median Pay (\$1,000s) and Pay Ratios, if Present, by Gender by Doctorate Type

Degree Type	Female Median Z 1000s	Female Z pay sample size	Male Median Z 1000s	Male Z pay sample size	Female/Male Ratio of Median Z
Both	10	1	128	1	0.08
Clinical	15	2	20	9	0.72
Research	10	1	15	2	0.63

Table 29: Unadjusted Median X + Y (\$1,000s) Pay and Pay Ratios by Gender by Series

Series	Female Median (X+Y) 1000s	Female sample size	Male Median (X+Y) 1000s	Male sampl e size	Female/Male Ratio of Median (X+Y)
Adjunct	114	4	144	2	0.79
ClinicalX	167	2	171	2	0.97
HSClinical	116	11	194	15	0.60
InResidence	132	2	120	1	1.10
LadderRank	169	12	205	22	0.82

Series	Female Presence of Z	Female sample size	Male Presenc e of Z	Male sample size	Female/Male Ratio of Presence of Z
Adjunct	0	4	0	2	•
ClinicalX	0.50	2	0.50	2	1
HSClinical	0.18	11	0.33	15	0.55
InResidence	0	2	0	1	
LadderRank	0.08	12	0.27	22	0.31

Table 30: Unadjusted Presence of Z (Proportion) and Ratios by Gender by Series

Table 31: Unadjusted Median Z Pay (\$1,000s) and Pay Ratios, if present, by Gender by Series

Series	Female Median Z 1000s	Female Z pay sample size	Male Median Z 1000s	Male Z pay sample size	Female/Male Ratio of Median Z
Adjunct		0	•	0	
ClinicalX	10	1	20	1	0.49
HSClinical	15	2	68	5	0.21
InResidence	•	0		0	•
LadderRank	10	1	19	6	0.51

# Appendix B

## Table for separate Peters Belson analysis

Using the PB method the estimated difference between expected and observed mean Z salaries of female faculty is \$23,971 - \$6202 = \$17,769 which was not explained by the adjustment covariates (rank and department found by AIC and C<sub>p</sub>); in this situation \$1066/\$18,835=6% of the difference between male and female faculty was explained by the covariates, so 94% of the discrepancy remained unexplained by the covariates.

Portion	Z Pay
Observed mean log Male O(m)	10.12812
Salary = exp(observed mean Male) O(m)	\$25,037.12
Observed log mean Female O(f)	8.73264
Salary = exp(observed mean Female) O(f)	\$6,202.11
Observed Gender Difference = Dm,f	\$18,835.02
PB model expected log mean Female E(f)	10.08460
Expected mean Female E(f)	\$23,971.00
D1f=O(m)-E(f)	\$1,066.13
D2f=E(f)-O(f)	\$17,768.89
Percent Explained = D1f/Dm,f	6%
Percent Unexplained	94%

#### UCSF School of Dentistry Supplemental Report on Faculty Salary Equity Review – November 20, 2015

#### Figures prepared by Dr. Charles McCulloch

This supplemental report provides the results of further analyses on the Faculty Salary Equity Review, completed subsequent to the first report, dated October 20, 2015, for the UCSF School of Dentistry. The conclusions of that first report are summarized as follows:

The findings of the first Faculty Salary Equity Review were:

- 1. It was not possible to show a difference in salary, accelerated actions and Z payments due to low numbers of URM faculty
- 2. There was no statistically significant difference in total salary between Female and Male faculty.
- 3. There were no statistically significant differences in in presence of Z factor by gender, however there were statistically significant differences in the amount of Z payments, Females receiving less than Males, the residual being \$17,769.
- 4. There were no statistically significant differences in accelerated advancements between Females and Males.

The action plan included a further analysis of the Female – Males differences in total salary and Z factors, and this second report reviews these further findings.

The findings from the first review were that, although not statistically significant, females were estimated to make 6% less than equivalent male counterparts. This was based on a model that adjusted for rank, step, department, degree type and series.

X plus Y pay	Ratio Incr.	Std. Err.	t	P> t	[95% Conf. Interval]	
Gender						
Female	0.94	0.061	-0.96	0.341	0.82	1.07

The model used in these analyses can also be used to generate expected amounts for faculty salaries, based on their assignment to Department and their rank, step, degree type, and series. These values were then compared to the actual faculty salaries to see if there were faculty who earned either much more or much less than these amounts. These are known as the "residuals" from the statistical model. These were then standardized to Z-scores by dividing by their standard error. So a standardized value of 1 would represent a faculty member with a salary one standard error higher than expected and a value of -2 would represent a faculty member with a salary two standard errors lower than expected. Even in cases when the overall analysis does not exhibit a statistically significant difference, this allows the identification of "unusual" salaries with the usual interpretation for Z-scores: values higher than 2 or lower than -2 are unusual and values greater than 3 or less than -3 are highly unusual.

Below is a table that shows all the faculty with standardized residuals from the analysis of the X plus Y pay that are less than -1.5 or greater than 1.5.

\*Ordered listing of those with X plus Y pay more than 1.5 standard errors from what is predicted by the model.

Gender	Rank	Step	Department	X plus Y	Predicted	Standardized
				Рау	Рау	residuals
М	Full	5	Preventive & Restorative Dental	129,700	195,929	-1.90
			Sciences			
М	Full	1	Orofacial Sciences	136,600	201,304	-1.81
М	Associate	3	Oral & Maxillofacial Surgery	151,500	209,220	-1.56
М	Full	5	Preventive & Restorative Dental	255,440	180,837	1.54
			Sciences			
М	Full	4	Orofacial Sciences	317,625	223,592	1.59
М	Associate	3	Orofacial Sciences	261,430	183,502	1.66
F	Full	5	Preventive & Restorative Dental	262,500	179,668	1.72
			Sciences			
М	Associate	2	Cell & Tissue Biology	240,000	167,835	1.82
М	Associate	2	Preventive & Restorative Dental	207,948	138,378	1.83
			Sciences			
М	Full	3	Preventive & Restorative Dental	290,443	182,682	2.19
			Sciences			
М	Assistant	2	Oral & Maxillofacial Surgery	250,000	152,482	2.49
M	Full	2	Preventive & Restorative Dental	293,700	162,810	2.76
			Sciences			

There are only two male faculty with values larger than 2 in absolute value. One of these faculty members is in Oral Surgery, a high producing Department. This faculty was a new hire and was provided with an additional Y payment as an incentive to join the Department. The second faculty member is a PRDS faculty member who has additional time allocated to patient care, and who generates a significant clinical income as a result. The higher salaries for male faculty were justified by legitimate business practices. There were no female faculty who were paid less than -1.5 (ie "underpaid").

When considering unadjusted Z payments to Females and Males, using the BYZ figures only, Females had a 36% lesser presence of Z than Males. The fully adjusted data showed this not to be a statistically significant amount.

Gender	Rank	Step	Department	Amount of Z(BYZ	Predicted Probability	Standardized
				only)	of a Z payment	Residual
М	Associate	2	Preventive & Restorative Dental	67,879	0.24	1.54
			Sciences			
М	Associate	1	Preventive & Restorative Dental	20,203.	0.23	1.58
			Sciences			
М	Full	6	Preventive & Restorative Dental	19,000	0.14	2.28
			Sciences			
М	Full	2	Preventive & Restorative Dental	11,460	0.12	2.48
			Sciences			
F	Assistant	3	Preventive & Restorative Dental	28,542	0.08	3.20
			Sciences			
М	Full	4	Orofacial Sciences	128,183	0.05	4.05

Analyses were performed on those faculty who had a small probability of receiving a Z payment, but did receive one:

Three male faculty, who were not likely to receive a Z payment did receive one. Two of these male faculty generated significant amounts of clinical income (\$128,183 and \$19,000). One male faculty was paid the Z payment in error. (\$11,460; He was a research faculty with no generation of clinical income and was assigned the Z payment by a new Department Chair). The Female faculty who received a Z payment when

this was not anticipated had received a Z payment, re-assigned from another more senior female faculty (The purpose being encouragement of the more junior faculty member to continue to work at UCSF by the more senior faculty member). This more senior female faculty received a significantly less Z payment than anticipated as a result.

It therefore appeared that there were no "underpaid" female faculty members. There were "overpaid" and "underpaid" male faculty; the small number of male faculty who were "overpaid" were assigned to Divisions or Departments that generate a significant clinical income. It is not known if there the same opportunities for female faculty in these Divisions and Departments. The male faculty who were "underpaid" received lower payments for legitimate business practices.

The final action plan is as follows:

- 1. Increase URM faculty in the School of Dentistry. John Featherstone has appointed a new Associate Dean for Diversity and Inclusion and efforts are underway with respect to this initiative.
- 2. Search processes will be continually reviewed and training provided to increase diversity and ensure that opportunities are provided for Female as well as Male faculty.
- 3. Additional training will be provided for Division Chairs, Heads of Department and Associate Deans for Academic Affairs to ensure appropriate accelerations for faculty, even when not requested by the faculty.

# School of Medicine

# Faculty Salary Equity Study - Summary

August 2015

Elena Fuentes-Afflick and Talmadge King

In January 2015, Vice Provost Brian Alldredge distributed the results of the 2014 UCSF Faculty Salary Equity Review. The campuswide analyses did not demonstrate any salary imbalance by URM status. However, there was a gender difference in salary (X+Y) and women's salaries were 3% lower than men's.

The School of Medicine conducted a similar set of analyses and found that female Associate Professors' salaries (X+Y) were 7% lower than male Associate Professors. There was no gender difference at other ranks and no URM differences at any rank. For the Z component of salary, the schoolwide analyses demonstrated a gender difference at Professor rank, and female Professors were 26% less likely to receive a Z payment than male Professors.

The School's Office of Academic Affairs also conducted a parallel set of analyses for each department and distributed the results to each department in April 2015. The Chair and Manager were asked to review the findings and propose solutions in case of a gender or URM imbalance. In May, the Office of Academic Affairs hosted a workshop to review the findings and assist chairs and managers with the interpretation of the findings.

Overall, seven departments reported statistically significant differences in salary by gender or URM status. All departments provided thoughtful analyses of the way in which salaries are determined and committed to ongoing review of compensation in order to minimize the risk of gender or URM-based differences in compensation.

The statistically significant findings were:

- 1. Gender
  - a. <u>Medicine</u>: Gender difference in X+Y salary (female OR 0.93). The department outlined the complex methodology that is used to determine salary and committed to a broader communication plan. In addition, the department will make salary adjustments, as needed, to rectify imbalances.
  - b. <u>Neurology</u>: Gender difference in the amount of Z payment (female OR 0.2). The department reported that Z payments are relatively new and they will incorporate a salary analysis into the annual division review process.

- c. <u>Otolaryngology</u>: Gender difference in the amount of Z payment (female OR 0.37). The department reported that variation in the amount of Z payment is related to the generation of RVU's and they will monitor on an ongoing basis.
- d. <u>Pediatrics</u>: Gender difference in X+Y salary (female OR 0.89). The department reported that the gender difference was a historical phenomenon and has been rectified with recent changes in compensation. The department analyzed more recent data and reported that there was no gender difference in X+Y salary.
- 2. URM status
  - a. <u>Family and Community Medicine</u>: URM difference in the amount of Z payment (URM OR 0.1). There are very few faculty members who receive a Z payment and the Chair does not believe that the results reflect a large-scale issue. The Chair will monitor on an ongoing basis.
  - b. <u>Obstetrics</u>: URM difference in X+Y salary (URM OR 0.73). The department was surprised by this finding and committed to reviewing all salaries on an annual basis, with a particular emphasis on URM faculty.
  - c. <u>Orthopedic surgery</u>: URM difference in the amount of Z payment (URM OR 0.15). The department replied that the payments are formulaic and they will review to ensure equity of opportunity to earn Z payments.

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

# Faculty salary equity study School of Medicine Follow-up January 2016

There were seven departments in the School of Medicine which reported a gender- or URMbased imbalance in compensation. This summary details the responses from each department; supplemental reports are attached.

# Family and Community Medicine

We obtained Z payment information for FY14, FY15 and FY16 (attachment, "FCM Z payment summary"). During that time, there were eighteen faculty members who received Z payments in the BYN or STP categories (attachment, second tab "By FY"). Dr. **Second Star Structure** (was the only URM faculty member who received a Z payment during the three-year period and the amount of Z payment for FY16 was \$11,468. This amount was similar to the Z payment in FY16 for five non-URM faculty members: Drs. **Second Structure** (\$10,000), and (\$12,500).

Based on this matched-pair comparison using FY16 data, we found no evidence of a URM-based difference in the amount of Z payment within the Department of Family and Community Medicine once the appropriate comparison was defined.

# Medicine

In December 2015 and January 2016 Dr. Wachter provided a revised set of analyses and narrative summaries.

First, Dr. Wachter confirmed that the \$916K used in FY16 to address FY15 imbalances was applied to the Y salary component of female faculty members ("Medicine imbalances report 12-24-15). He noted that they made a correction in the calculation of the \$916K figure and the correct figure is \$857K.

To explain why the original \$2.4M "disparity" was adjusted to \$916k in the spreadsheet prepared by Michael Chen, Dr. Wachter explained that the \$2.4M figure referred to the FY15 imbalance that existed in the X+Y salary components of 140 female faculty who continued to have appointments in FY16. In contrast, the \$916K figure (now corrected to \$857K) was the amount the department allocated in FY16 to increase the Y component for a portion of this same group of female faculty.

When asked to confirm that the \$416K and \$190K figures represent an inequity and that the remaining \$300K requires further analysis to determine how much represents an "inequity" and how much represents an "imbalance," Dr. Wachter replied "[a]ssuming that the \$416K is a typo and is actually a reference to the \$486K in increases needed to eliminate the overall statistical significance of gender-based imbalance in the DOM, we can confirm that the \$187K represents

an inequity (at least according to our analysis and review by division chiefs), and that the remaining \$299K requires further analysis to determine how much represents an inequity versus an imbalance. In 63 instances (81 if you include the 18 VA faculty for whom we proposed no adjustments), we have noted either legitimate reasons for the underlying imbalances or, at least, compelling reasons to question whether these instances represent true imbalances ("Medicine FY15 and FY16 MD imbalances," column AU in Appendix B)."

To explain why the department has recommended correction for some, but not all salary imbalances, Dr. Wachter explained that each division director was asked to review the salary of all division members. The division chiefs made a formal recommendation to the Chair regarding imbalances that were identified in the department's analytic model. Some of the imbalances were deemed to require immediate action during the current fiscal year because they could not be explained and were deemed unjustified by the division director. Some of the imbalances were puzzling, particularly for divisions that utilize a salary scale to determine compensation and the division directors requested time to analyze and consider changes for FY17. Other imbalances were challenging because automatic correction would create a new imbalance for another faculty member. Given the variation in the findings and the recommendations from the division directors, the department recommends adjustment in FY16 for 39 faculty members for a total of \$187k. For the remaining 63 salary imbalances that were identified in the department's report (total \$299k), Dr. Wachter reported that the underlying explanation for the imbalance would require detailed review and that they would undertake such a process as they prepare the FY17 budget. He reiterated the department's commitment to addressing gender equity.

Dr. Wachter also clarified that the amount of the imbalance should not be directly compared between fiscal years. Specifically, for FY15 the department identified a gap of \$2.4M and allocated \$857k in FY16 to address salary differences. For FY16 it would not be correct to infer that the gap would be the difference between the FY15 gap (\$2.4M) minus the funds allocated to address salary differences (\$857k). As documented in Appendix B, Column AT, the department's analysis for FY16 identified a gender difference of \$486,116. Dr. Wachter's proposal to address this gap is detailed in the summary paragraph at the end of this section.

The committee asked Dr. Wachter to "use the standard language, i.e., 'inequity' and 'imbalance' rather than introduce a new term (disparity) to ensure clarity around those concepts. Per the original FSER report, the Committee used the term 'imbalance' rather than 'inequity' until such time as any salary differences between groups could not be explained by non-discriminatory legitimate business practices of the University or campus unit." In his reply, Dr. Wachter stated that "[w]e have revised the narrative accordingly."

The committee asked Dr. Wachter to provide an "explanation of the rationale for determining which inequities were resolved versus those that were mitigated but not fully resolved." He explained that "FY15 imbalances were considered *fully* resolved for specific faculty if that faculty member did not appear on the list of imbalances identified in our regression analysis for FY16. FY15 imbalances were considered *partly* resolved for specific faculty if a Y increase was given to the faculty member in FY16, but the specific faculty member continued to have an imbalance identified in our regression analysis for FY16."

When the committee asked Dr. Wachter to clarify "why additional inequities have been introduced for newly hired faculty (Wachter letter 12/4/15)," Dr. Wachter replied "[t]he imbalances for 21 newly hired faculty spread across 11 divisions were not intentionally introduced and only became apparent from our regression analysis for FY16. 13 of the 21 imbalances are in 5 divisions (DGIM and Hospital Medicine at both the UC and SFGH sites, plus Geriatrics) that adhere to salary scales, so this result seems counter-intuitive and will require further analysis."

In response to the committee's request for an updated spreadsheet that details "employee ID number, employee name, Y salary corrections already enacted for FY16, potential additional Y adjustments for FY16 (ongoing inequity identified), and salary imbalance that does not require adjustment to Y salary with rationale," Dr. Wachter replied "An updated spreadsheet is attached. Y salary corrections already enacted for FY16: column BQ in Appendix A. Potential additional Y adjustments for FY16 (ongoing imbalance identified): column AW in Appendix B. Salary imbalance that does not require adjustment to Y salary with rationale."

Dr. Wachter also confirmed submission of a revised narrative that tracks to the numbers in the spreadsheet.

In summary, the gender-based salary imbalance for FY16 in the Department of Medicine is \$486,116. Dr. Wachter believes that it is appropriate to allocate \$187k to address these imbalances, which are distributed among three groups of faculty: 1) faculty who had a salary imbalance in FY15 that was not fully resolved in FY16 (total \$135,273, Appendix B, Column BC); 2) faculty who did not have a salary imbalance in FY15 but for whom an imbalance was identified in FY16 (total \$24,192, Appendix B, Column BD); and 3) newly hired faculty with a salary imbalance (total \$27,391, Appendix B, Column BE). The remaining difference in compensation (\$299,260) requires more detailed analysis that will be undertaken as the department prepares the FY17 budget.

We accept the department's thorough and thoughtful analysis and commend the department for the \$857,000 which was allocated in FY16 to female faculty to address salary imbalances.

We support Dr. Wachter's recommendation that the department undertake retroactive salary adjustments of \$187,000 to mitigate the salary difference for thirty-nine faculty members (\$135k for faculty with ongoing salary imbalances, \$24k for faculty with newly identified salary imbalances and \$27k for newly hired faculty with salary imbalances).

We strongly support the department's plan to review all remaining gender-based differences in compensation to identify those differences which may be justified by clinical or administrative roles from those which are not justifiable and will require adjustment.

## Neurology

In response to the committee's inquiry (Hauser email, 12-10-15), Dr. Hauser reported one situation of "lower than expected pay without a clear rationale. In one case, two new clinical faculty members in the headache division started around the same time. The male makes a salary

of \$200k and the female makes a salary of \$170k. This was circumstantial due to the recruitment path. We would like to remedy that."

To rectify the salary difference, Dr. Hauser stated that the newly hired female faculty member will receive a supplemental Z payment during FY16 and that her salary (X/Y) will be readjusted in July 2016.

To address this gender-based salary difference in the Department of Neurology, the committee recommends that the Chancellor stipulate that the newly hired female faculty member receive a retroactive salary increase in X/Y compensation with an effective date of 7/1/15.

## Obstetrics, Gynecology and Reproductive Sciences

The department of Obstetrics, Gynecology and Reproductive Sciences submitted follow-up data ("ObGYN Faculty Salary Inequity, Dec 2015") which documented only one instance of URMbased salary difference (Dr. 56,500). For the other URM faculty in the department, the departmental analysis demonstrated that the URM midwives and physician faculty are not undercompensated relative to their peers. In addition, several URM faculty, both CNM and physicians, have left UCSF since the original reporting period and were not eligible to be included in the follow-up analysis.

We accept the department's analysis and agree that there is no evidence of a URM-based imbalance in compensation once the appropriate comparison was defined.

## Orthopedics

The department of Orthopaedic Surgery conducted additional analyses of FY14 data to address the School's finding of a URM-based difference in the amount of Z payment ("Ortho analyses, URM versus non-URM with non-surgeons, 1-4-16"). First, the department was only able to identify one URM faculty member, which limits the statistical reliability of the analyses. The analyses focused on the amount of Z (bonus) payment to Dr.

Mr. Capra explained that the "bonus pool" is different for the UCSF and SFGH campuses. Thus, the most appropriate matched-pair comparison is between (Analysis C). In FY14, Drs. received equal Z

#### payments.

The difference between the department's analyses and the School's finding of a URM-based difference in the amount of Z payment may be related to the fact that the School's model did not account for site-based differences in the bonus pool nor differences according to surgical or non-surgical subspecialty. As noted in the department's Analyses A and B, surgical faculty members generally received much higher Z payments than non-surgeons.

We accept the department's analysis and agree that there is no evidence of a URM-based imbalance in Z payments once the appropriate comparison was defined.

# Otolaryngology

In December 2015 Dr. Murr provided supplemental analyses which explained that Z payments are determined by team-based metrics as well as individual RVU productivity ("OTO Response, final Dec 28, 2015). Dr. Murr analyzed data for the two most recent fiscal years (FY14 and FY15) and reported that there was no gender difference in the amount of Z compensation per RVU unit (Attachment A). When he compared the Z payments distributed in FY15 by gender, rank, and RVU productivity within the clinical divisions which include female faculty members, Dr. Murr demonstrated that female faculty members were not disadvantaged in Z payments (Attachments B, C, D, and E). At SFGH, the Z payments are based on time rather than RVU units.

payments that were given to three female faculty members in recognition of special accomplishments

We accept Dr. Murr's analysis and agree that there is no evidence of a gender-based imbalance in Z payments once the appropriate comparison was defined.

## Pediatrics

Dr. Ferriero's revised report ("Pediatrics analyses, Dec 2015") documented the salary adjustments that were made to address gender-based differences in compensation.

We accept Dr. Ferriero's analysis and agree that the gender-based salary difference has been fully addressed.