

DATA ANALYSIS
FACULTY SALARIES
USC COLUMBIA
FALL 2002

Report of the
Faculty Salary Equity Oversight Committee

Prepared by the
Office of the Provost
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At the direction of President John M. Palms, the Faculty Salary Review Committee was established in 1993. The Faculty Salary Equity Oversight Committee was created in April 1996 to be advisory to the Provost and to continue the work of the original committee, with the following charge:

- A. To review on an annual basis a statistical analysis of faculty salaries to be provided by the Office of Institutional Planning and Assessment. The statistical analysis will be conducted to determine the presence of gender or race as a factor in the determination of salaries.
- B. To identify and report to the Provost those faculty members whose salaries appear to warrant further explanation by their dean and department chair on the basis of gender or race. The Provost will receive the explanations from the deans and will in turn report the results of the analysis to the faculty.
- C. To accomplish the above tasks in a timely manner that will allow for meaningful input to the deans and department chairs in making annual salary recommendations.

The committee consists of six members, three administrators selected by the President and three faculty members selected by the Provost from recommendations of the Faculty Advisory and Faculty Welfare Committees. The current committee is composed of one African-American male, three white males, and two white females.

I. Procedure

- A. In April 2003 the Office of Institutional Planning and Assessment conducted a statistical analysis of the salaries of tenure track and tenured faculty members on the USC Columbia campus for Fall 2002. The analysis was conducted under the direction of Associate Provost and Dean of the Graduate School Gordon B. Smith.
- B. The regression formula used was a modified version of the one from the 1994 study chaired by Dr. Lori A. Thombs, Department of Statistics. The regression formula and its explanation are included in Attachment A. Following the Committee's recommendation, the regression formula was reviewed and modified to include a quadratic term for time in rank for assistant and associate professors.

- C. The data were sent to the academic deans for data verification and the analysis was subsequently updated to include any changes.
- D. In May 2003 the results of the regression analysis for their respective faculty members were distributed to each dean. Each dean was asked to formally explain the basis of each faculty member's salary that was equal to or more than one and one-half standard deviation (i.e., -1.50; hereafter "Selected Group") below the salary predicted by the regression formula. In addition, the committee evaluated scatterplots of faculty by department and rank. In some cases, faculty members who were "outliers" on the scatterplots were incorporated in the Selected Group even though their standard deviations did not exceed -1.50. To support the explanation, the deans were directed to provide the past three years' written annual evaluations for each faculty member in the selected group if they had not been recently evaluated by the committee. For those whose cases had been considered in the past two years, the committee only requested the most recent annual evaluations. The memorandum of transmittal from Dr. Smith to the deans is included as Attachment B.
- E. In July 2003 the data analysis of the Selected Group of faculty members was transcribed into a spreadsheet format for further analysis and review by the Faculty Salary Equity Oversight Committee. The Committee met to review all available information and make recommendations to the Provost.

Procedural Note: All faculty salaries are nine-month salaries or converted to nine-month salaries for purposes of the analysis. The library faculty members were excluded from the regression analysis because, while they may have tenure, they are without academic rank. The clinical faculty of the School of Medicine were excluded because the School of Medicine Practice Plan prohibits valid comparisons.

Selected Group: Descriptive Summary

The Fall 2002 regression analysis of 925 full-time ranked faculty members yielded a total of 39 faculty members that made up the Selected Group. As seen in the comparisons below, of the 39 faculty members in the Selected Group, seven are women and two are African-American.

- A. The following compares several demographic characteristics of the Selected Group with the general faculty population:

Type	Category	<u>Selected Group</u>		<u>Faculty Population</u>	
		<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
1. Race	African-American	2	5.1	36	3.9
	Other	37	95.0	889	96.1
2. Sex	Female	7	17.9	239	25.8
	Male	32	82.1	686	74.2
3. Rank	Professor	26	66.7	394	42.6
	7.7% Female (N=2)			11.7% Female (N=46)	
	92.3% Male (N=24)			88.3% Male (N=348)	
	Associate	10	25.6	312	33.7
	40.0% Female (N=4)			30.4% Female (N=95)	
	60.0% Male (N=6)			69.6% Male (N=217)	
Assistant	3	7.7	219	23.7	
	33.3% Female (N=1)			44.7% Female (N=98)	
	66.7% Male (N=2)			55.3% Male (N=121)	

B. The following information details the academic unit affiliation of the Selected Group:

<u>Academic Unit</u>	<u>Selected Group</u>		<u>Faculty Population</u>	
	<u>N</u>	<u>Female/Male</u>	<u>N</u>	<u>Female/Male</u>
Business Administration	9	0/9	88	14/74
Education	1	0/1	66	30/36
Engineering	3	0/3	81	7/74
HRSM	0	0/0	25	9/16
Law	1	0/1	39	6/33
Liberal Arts	15	5/10	291	92/199
Mass Comm. & Info. Sci.	1	1/0	26	11/15
Medicine	1	1/0	29	7/22
Music	0	0/0	37	7/30
Nursing	0	0/0	13	12/1
Pharmacy	0	0/0	14	2/12
Public Health	3	0/3	41	17/24
Science & Mathematics	5	0/5	152	13/139
Social Work	<u>0</u>	<u>0/0</u>	<u>22</u>	<u>11/11</u>
TOTALS	39	7/32	925	239/686

C. The following summarizes the reason or basis given by the deans for the salary level of the faculty members in the Selected Group. Note that the deans occasionally listed more than one reason, so the total N equals more than the 39 faculty members in the Selected Group and the percentages total more than 100 percent.

<u>Reason</u>	<u>N</u>	<u>%</u>
Unsatisfactory Performance	6	15.4
Marginal Performance	24	61.5
Compression	10	25.6
Low salary at time of hire (w/ average raises)	2	5.1
Change in faculty status (non-tenure to tenure)	1	2.6
Salary adjustment made after data were generated	8	21.0
Resigned/retired from University	0	0.0

Note: Of the 10 faculty members whose salaries were influenced at least partially by compression, nine had evaluations that also cited “performance” as part of the reason for their salary level.

II. Conclusions

- A. Out of a faculty population of 925, 39 (4.2%) were identified for further review as the Selected Group.
- B. Of the 39 faculty members in the Selected Group, the salaries of 30 were shown to be based on performance. Eight faculty members received salary adjustments during the year or as a result of this study.
- C. Two junior or newly-hired faculty members were identified in the 2001 Selected Group, both of them are female. One was hired recently as an Associate Professor without tenure. The other, a newly-hired Assistant Professor had a low salary at the time of hire and her salary relative to her colleagues was exacerbated by the merger of her department with another unit where starting salaries are significantly higher.
- D. Compression has been identified as the basis for 10 faculty members being included in the Selected Group. The Faculty Salary Equity Oversight Committee is not charged with addressing compression issues; however, the names of those faculty identified in this category will be forwarded to the respective deans for possible adjustment. The Committee recognizes that lack of raise money provided by the State has severely limited the ability of department chairs and deans to make salary adjustments to address problems of compression.
- E. No cases of salary inequity based on race or gender were identified.
- F. The Committee recommends that in future studies the Committee continues the practice of identifying those faculty members with salaries equal to or more than 1.5 standard deviation (i.e., -1.5) below the salaries predicted by the regression formula and/or identified as “outliers” on unit scatterplots.
- G. The Committee recommends that the modified regression formula continue to be reviewed to determine if it is still meeting the intended needs of the University.
- H. The Committee recommends that membership on the Committee rotate on a regular basis and that at least two members be replaced for AY 2003-04.

