

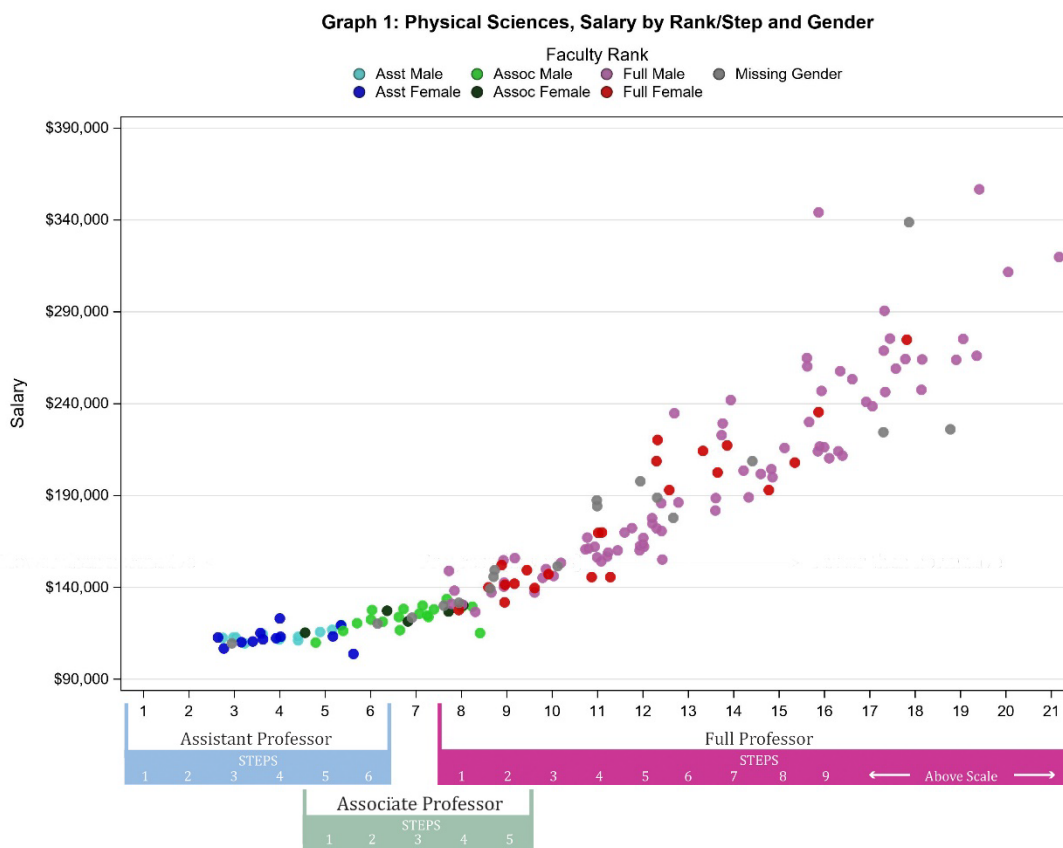
Overview

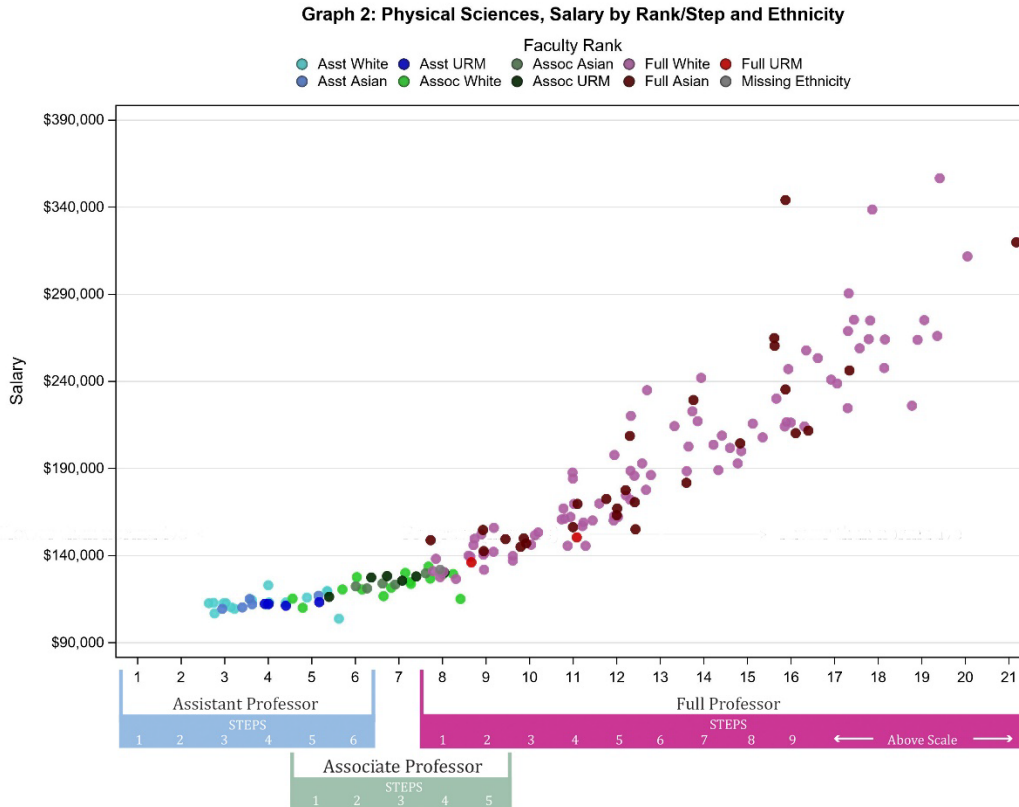
A committee conducted and prepared the annual campus pay equity study of faculty salaries for Professors and Professors of Teaching. The analyses presented in this report focus on the regression models and rate of progression through the ranks, consistent with our campus practice 2015-present. Data are examined at the whole campus level, and for 14 Schools/Units. Since 2020, Professors of Teaching are included in the analyses with faculty in the Professor series. This occurred with the transition of Lecturers with Security of Employment to Professors of Teaching titles and placement on the same rank/step system employed for the Professor series faculty. For analytical purposes, Professors and Professors of Teaching are treated as a single group. Analysis of salary data from October 2022 indicated that, after adjusting for experience, discipline, and rank, there was no evidence of systematic disparity in pay associated with gender and/or ethnicity at the campus level.

Methodology (see campus level report)

Results

- Salary data for all ladder rank faculty plotted as a function of rank/step/gender and rank/step/ethnicity illustrated in Graphs 1 and 2. The salary data used in the analysis does not include summer salary.





- Multiple regression analysis of salary vs rank/step. As indicated in Table 1, the simplest model with only demographic variables shows that relative to white male faculty, women earn salaries that are around 14% lower, Asian faculty 1% higher and URM faculty earn 25% lower. Only 12% of salary variation is explained by this model. After all control factors are added, 94% of salary variation is explained by a model with demographic, experience, field, and rank variables. After adjusting for covariates, relative to white male faculty, salaries are around 1% higher for faculty who are women, 2% higher for Asian, and 0.5% lower for URM faculty. This model also shows that demographic variables are not statistically significant determinants of faculty salary. The final model predicted salaries within plus or minus 17.0%. (For technically-minded readers, the RMSE on the log base 10 scale is 0.034.)

Table 1

Model ¹	R-sq	Significant Variables	Salary Difference		
			Women vs Men	Asian vs White	URM vs White
1 Demography	0.12	Women**, URM**	-14.0%	0.8%	-25.1%
2 Demography, Experience	0.72	Experience***	-5.3%	3.5%	-7.0%
3 Demog, Exper, Field	0.74	Women*, Experience***, Field**	-6.6%	4.5%	-6.3%
4 Demog, Exper, Field, Rank	0.95	Asian*, Rank***	1.6%	3.4%	0.5%
5 Demog, Exper, Field, Rank ²	0.94	Experience***, Rank***	1.4%	2.1%	-0.5%

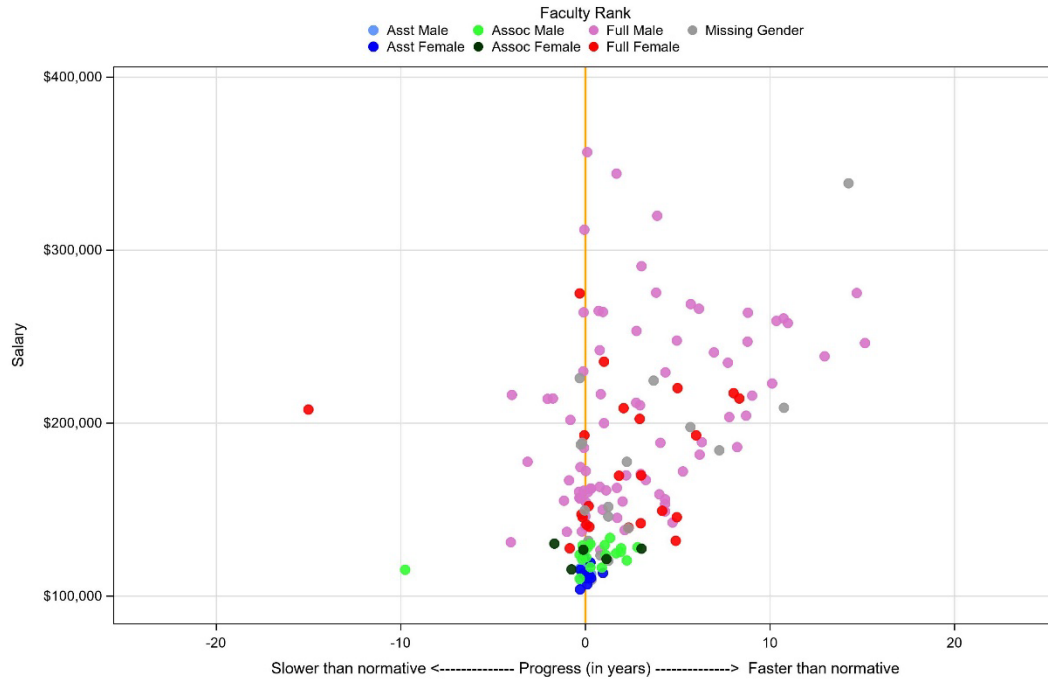
*p<0.05, **p<0.01, ***p<0.001

¹Experience includes years of service, years since degree, and decade of hire. Field includes department and the market ratio of salaries tied to the faculty member's department. Rank includes their starting rank at UCI, their current rank at UCI, and where they stand in relation to normal progress.

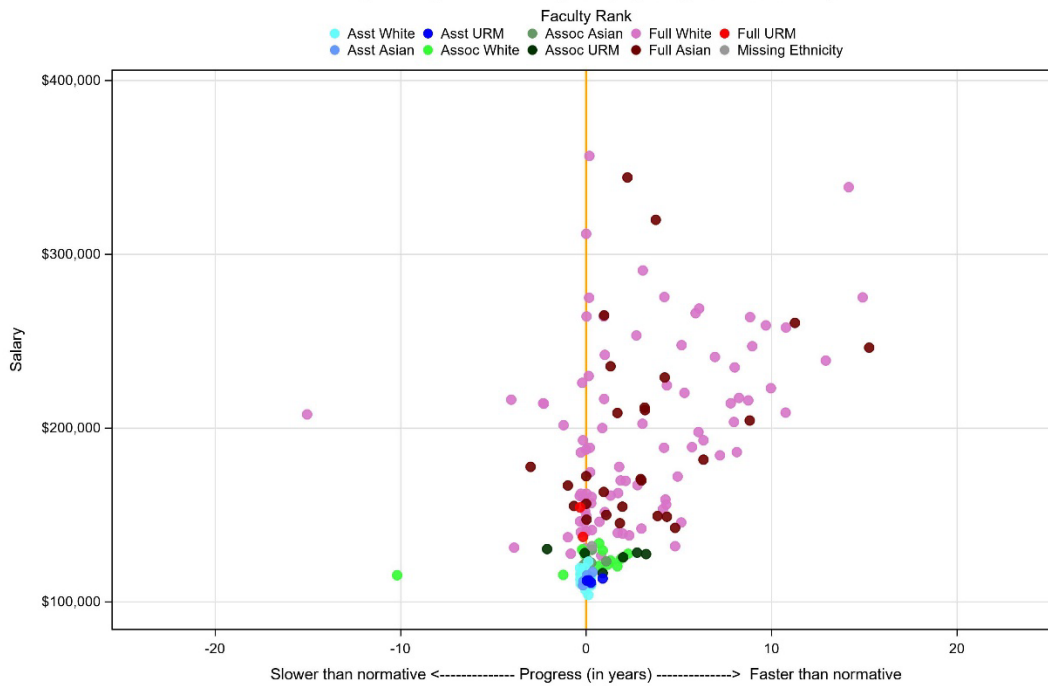
²Final model adjusted for collinearity and included demographics, department, years of service***, market salary ratio, progress***, and initial rank***.

3. Progress Rate plotted as a function of gender and ethnicity illustrated in Graphs 3 and 4

Graph 3: Physical Sciences, Salary by Progress and Gender



Graph 4: Physical Sciences, Salary by Progress and Ethnicity



4. Progress Rate Analysis: Using a simple t-test, the results indicate that there is no statistically significant difference in progression rate means for women or Asian faculty compared to white male faculty. However, URM faculty progressed at a rate that is 1.6 years slower than white males. After using multivariate regression to adjust for experience, discipline, and initial rank, there was no statistically significant difference in rates of progression between White men, women, URM, or Asian faculty.

Table 2

Progress Rate (in years) Comparison

Comparison	n	Mean	t	df	p-value
White Male vs	74	2.31			
Women	40	1.08	-1.60	112	0.112
URM ^a	12	0.67	-2.59	47	0.013
Asian	38	2.16	-0.20	110	0.845

^aHomogeneity of variance assumption not met. Satterthwaite variance estimator used.

Note. Multivariate regression was conducted estimating rates of progression adjusting for experience, discipline, and initial rank. These analyses showed no significant differences between White men and Women, URM, or Asian faculty.