

Overview

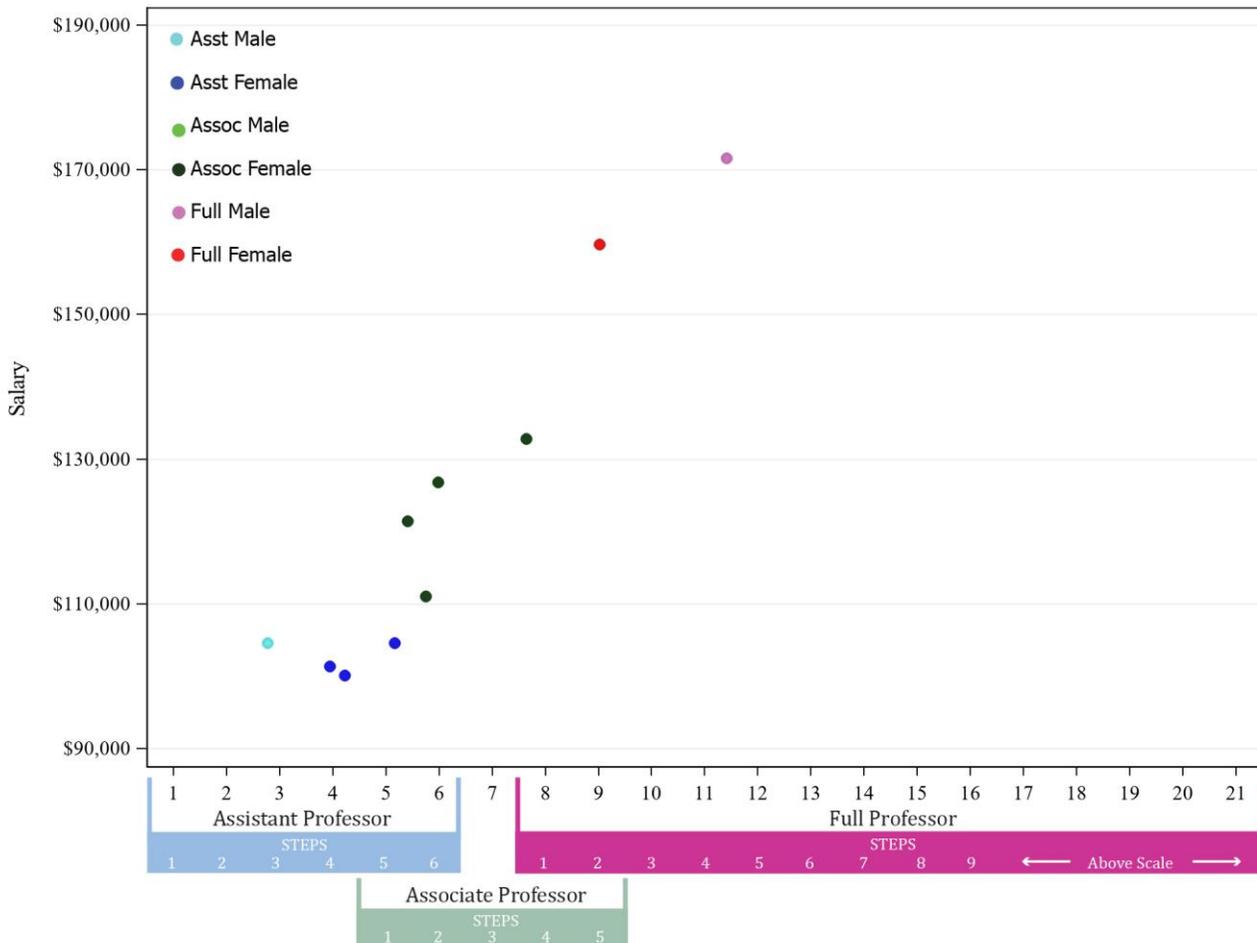
A joint Administration-Academic Senate Committee redesigned our annual campus pay equity study of ladder rank faculty salaries. The analyses presented in this report focus on regression models that go beyond the annual residual analysis conducted in the past (1997-2014) and include evaluation of rate of progression through the ranks. Analysis of salary data from October 2018 indicated no evidence of systemic disparity in pay associated with gender and/or ethnicity at the campus level when experience, discipline, and rank are included in the model.

Methodology (see campus level report)

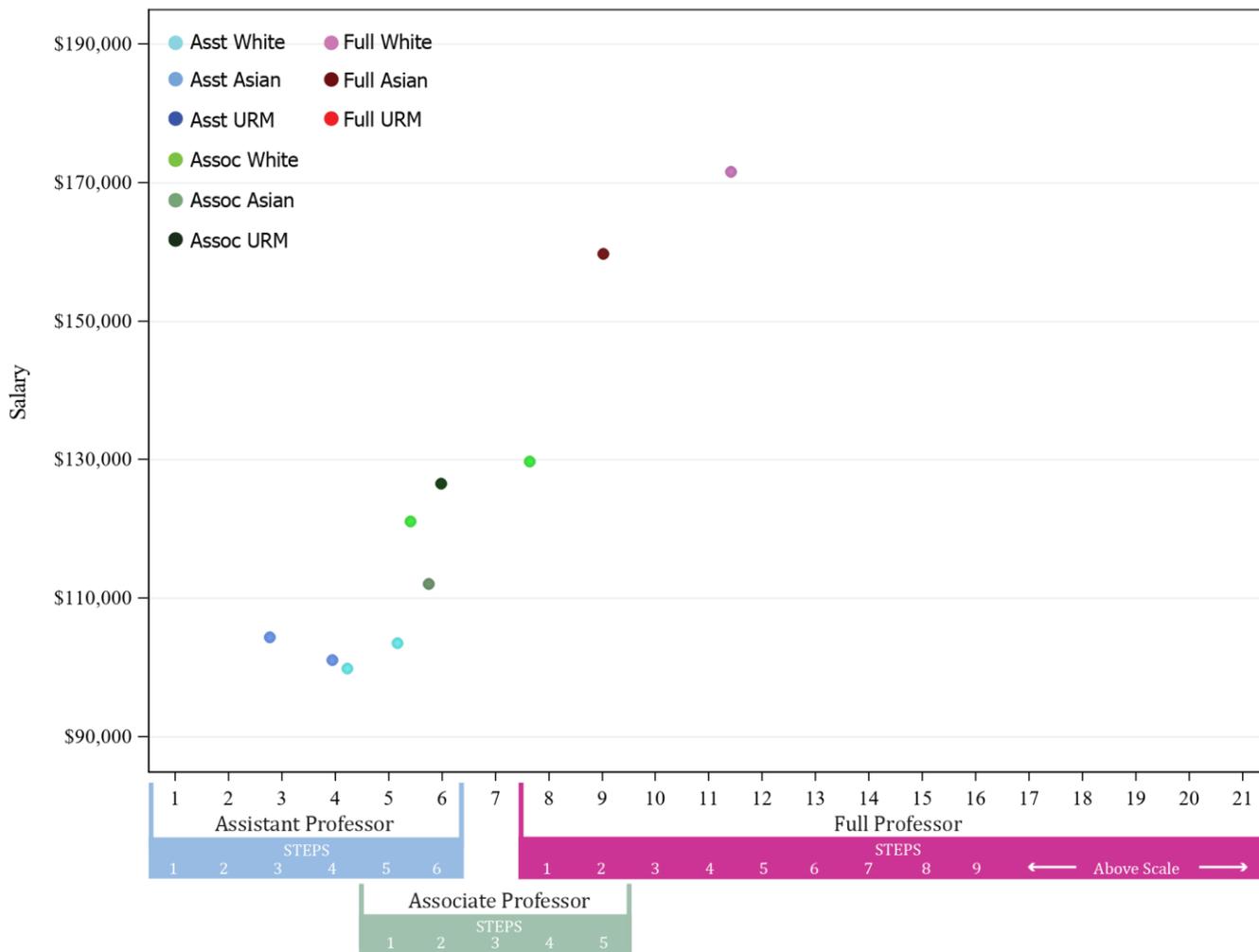
Results

- 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.

Graph 1: Nursing Science, Salary by Rank/Step and Gender



Graph 2: Nursing Science, Salary by Rank/Step and Ethnicity



- Multiple regression analysis of salary vs rank/step. As indicated in Table 1, simplest model with only demographic variables shows that relative to male faculty, women earn salaries that are 13% lower and Asian faculty 5.6% lower than white faculty. Only 11% of salary variation is explained by this model. After all control factors are added, almost 100% of salary variation is explained by a model with demographic, experience, field, and rank variables. After adjusting for covariates, relative to male faculty, salaries are 5.9% lower for faculty who are women, 6.4% higher for Asian faculty, and 4.8% lower for URM faculty. This model also shows demographic variables are not statistically significant.

Table 1

Submodel <sup>1</sup>	R-sq	Significant Variables	Salary Difference		
			Women vs Men	Asian vs White	URM vs White
1 Demography	0.11		-12.8%	-5.6%	5.2%
2 Demography, Experience	0.86	Experience*	-2.2%	8.8%	-5.5%
3 Demog, Exper, Field	0.86		-4.0%	8.1%	-5.9%
4 Demog, Exper, Field, Rank	1.00		-0.8%	12.6%	-5.6%
5 Demog, Exper, Field, Rank <sup>2</sup>	0.99	Experience*, Rank*	-5.9%	6.4%	-4.8%

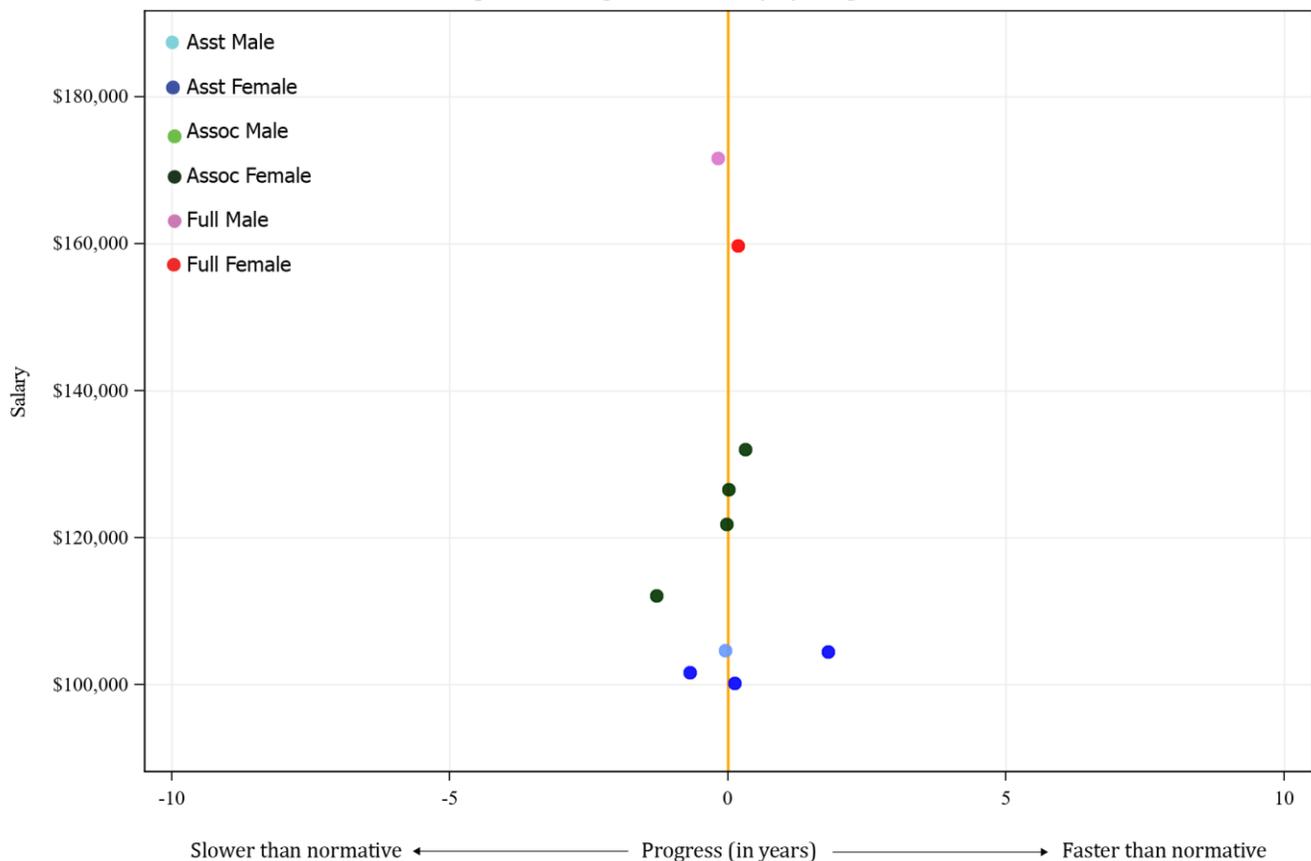
\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

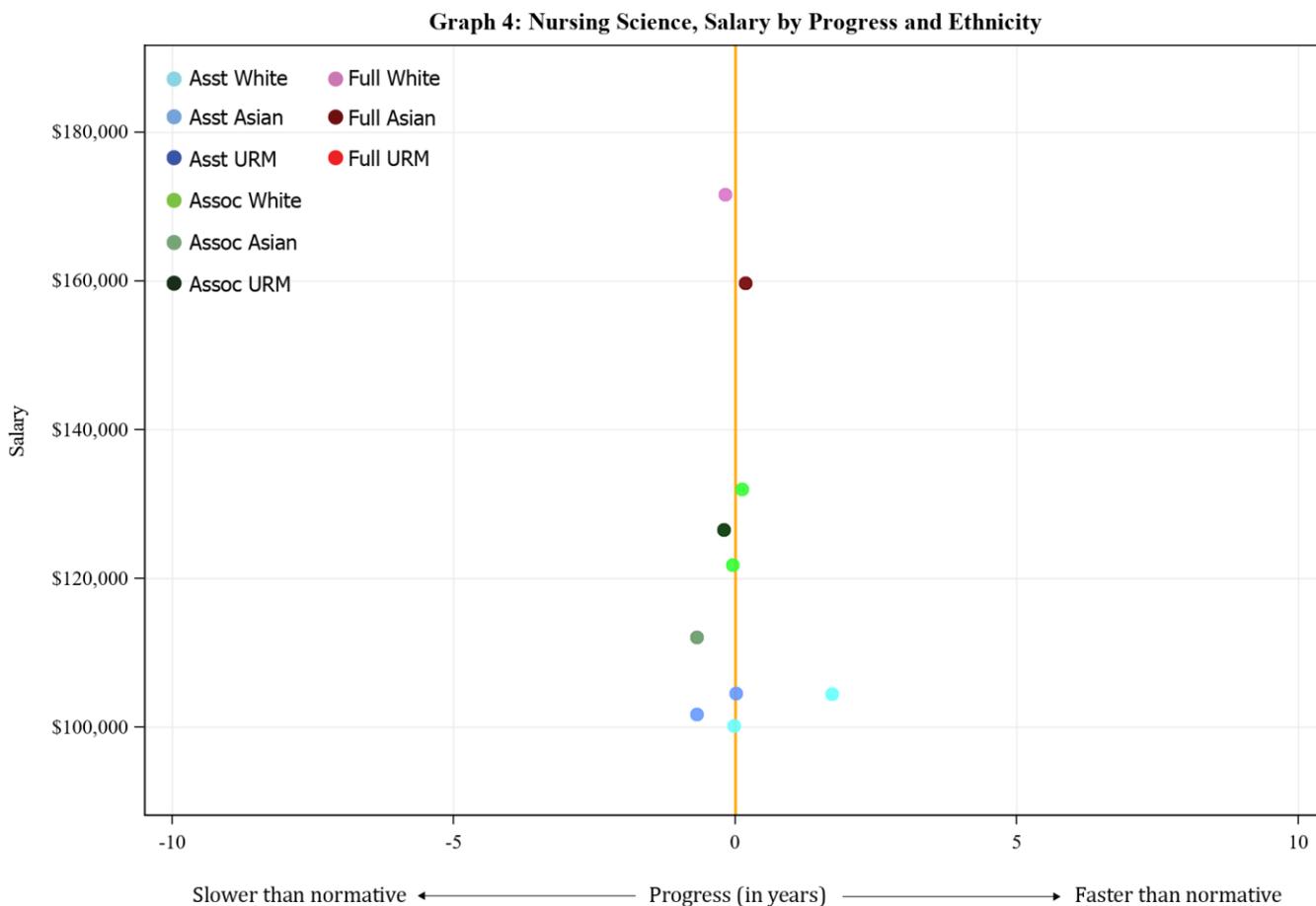
<sup>1</sup>Experience includes years of services, years since degree, and decade of hire. Field includes department and the market ratio of salaries tied to the faculty member's department. Rank includes their starting rank at UCI, their current rank at UCI, and where they stand in relation to normal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

<sup>2</sup>Final model corrected for collinearity and included demographics, years since degree, decade of hire\*, market salary ratio and rank\*.

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

Graph 3: Nursing Science, Salary by Progress and Gender





4. Progress Rate Analysis: Given that there is only one white male faculty in the School of Nursing Sciences, inferential tests of progression rate comparing white male faculty to other faculty by gender and ethnicity is not applicable.

Table 2. Progress Rate (in years) Comparison

Comparison	n	Mean	t	df	p-value
White Male vs	1	0.00			
Women	8	0.00	--	--	--
URM	1	0.00	--	--	--
Asian	4	-0.50	--	--	--