

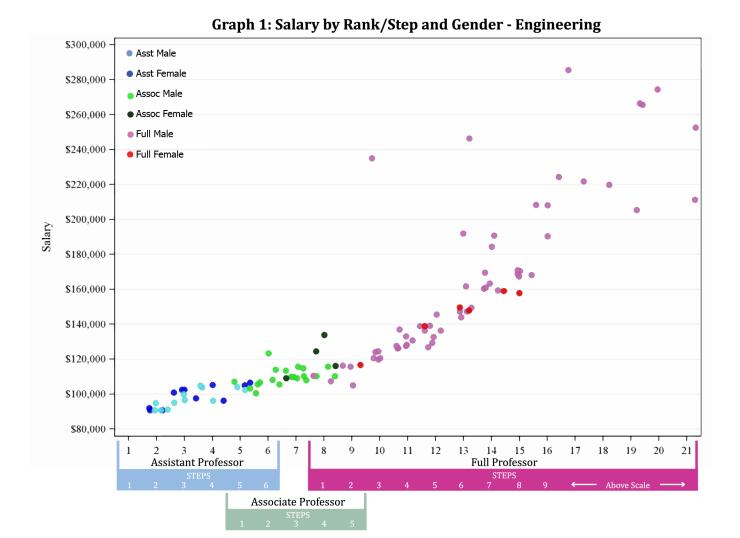
### Overview

A joint Administration-Academic Senate Committee has undertaken the planning and execution of an equity study on ladder rank faculty salaries. The analyses presented 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. The methodology used and results for the analyses at the whole campus level are available in the campus report. Results of the school level analyses are available in separate reports for each of 14 Schools/Units. SOM faculty continue to be excluded from this study due to the differences in compensation associated with participation in the COMP plan.

Methodology (see campus level report)

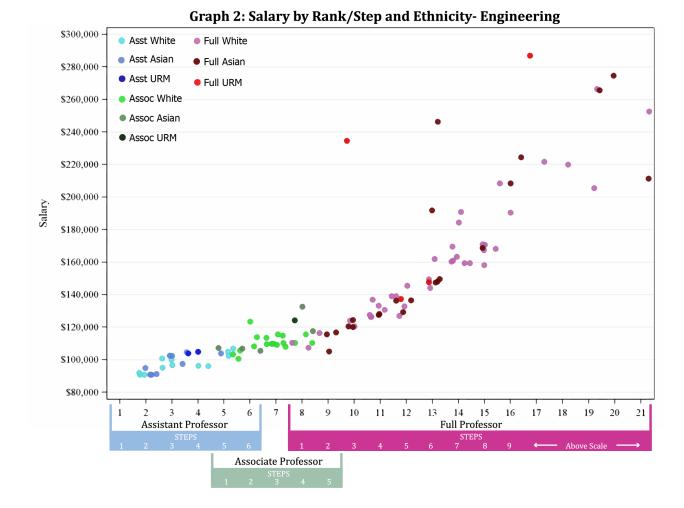
### Results

1. Salary data for all ladder rank faculty plotted as a function of rank/step/gender and rank/step ethnicity.





## Faculty Salary Equity Study School of Engineering



2. Multiple regression analysis of salary vs rank/step. As indicated in Table 1, the simplest model with only demographic variables shows women earn salaries that are 30% lower, Asian and URM faculty earn 25% and 14% more, respectively, compared to their colleagues who are white and male. However, only 10% of salary variation is explained by this model. As control factors are added to the model, salary differences change with women earning 3% less, Asian faculty earn 3% more, and URM faculty earn 10% more, compared to white male faculty. The percentage of salary variation explained by the model increases to 92%.



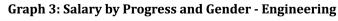
# Faculty Salary Equity Study School of Engineering

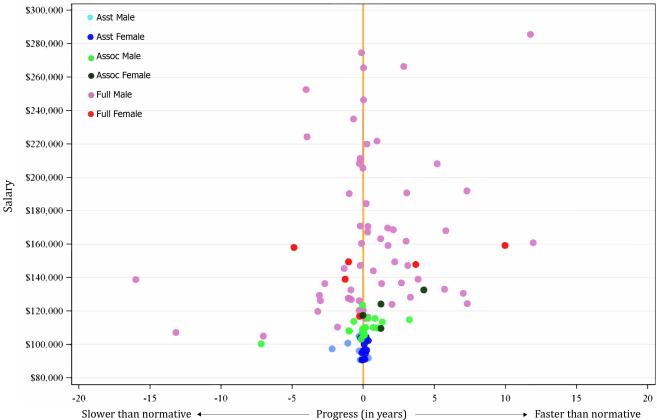
Table 1.

			Salary Difference		
Submodel	R-sq	Significant Variables	Women vs White Men	Asian vs White Men	URM vs White Men
1 Demography	0.10	Women**	-30.0%	4.9%	14.4%
2 Demography, Experience	0.74	URM**,Experience***	-5.8%	3.6%	16.3%
3 Demog, Exper, Field	0.75	URM**,Experience***	-4.5%	2.7%	18.1%
4 Demog, Exper, Field, Rank	0.92	URM**,Rank***	-2.4%	2.9%	9.5%
5 Demog, Exper, Field, Rank <sup>1</sup>	0.92	URM**,Exper*,Rank***	-2.7%	2.8%	9.7%

<sup>\*</sup>p<0.05, \*\*p<0.01, \*\*\*p<0.001

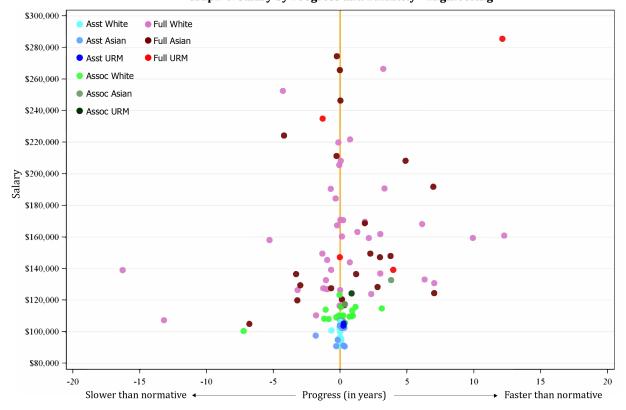
### 3. Progress Rate plotted as a function of gender and ethnicity





<sup>&</sup>lt;sup>1</sup>Final model corrected for collinearity.

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**Graph 4: Salary by Progress and Ethnicity - Engineering** 

4. <u>Progress Rate Analysis</u>: The results indicate there isn't a statistically significant difference in progression rate means by either gender or ethnicity when compared to white male faculty, indicating there is no evidence of biases against promotion.

Table 2. Progress Rate (in years) Comparison

Comparison	n	Mean	t	df	p-value
White Male	58	0.09			
Women vs White Male	22	0.59	0.56	78	0.5739
URM vs White Male	7	2.29	1.40	63	0.1653
Asian vs White Male	36	0.42	0.45	92	0.6554