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%.

Table 1.

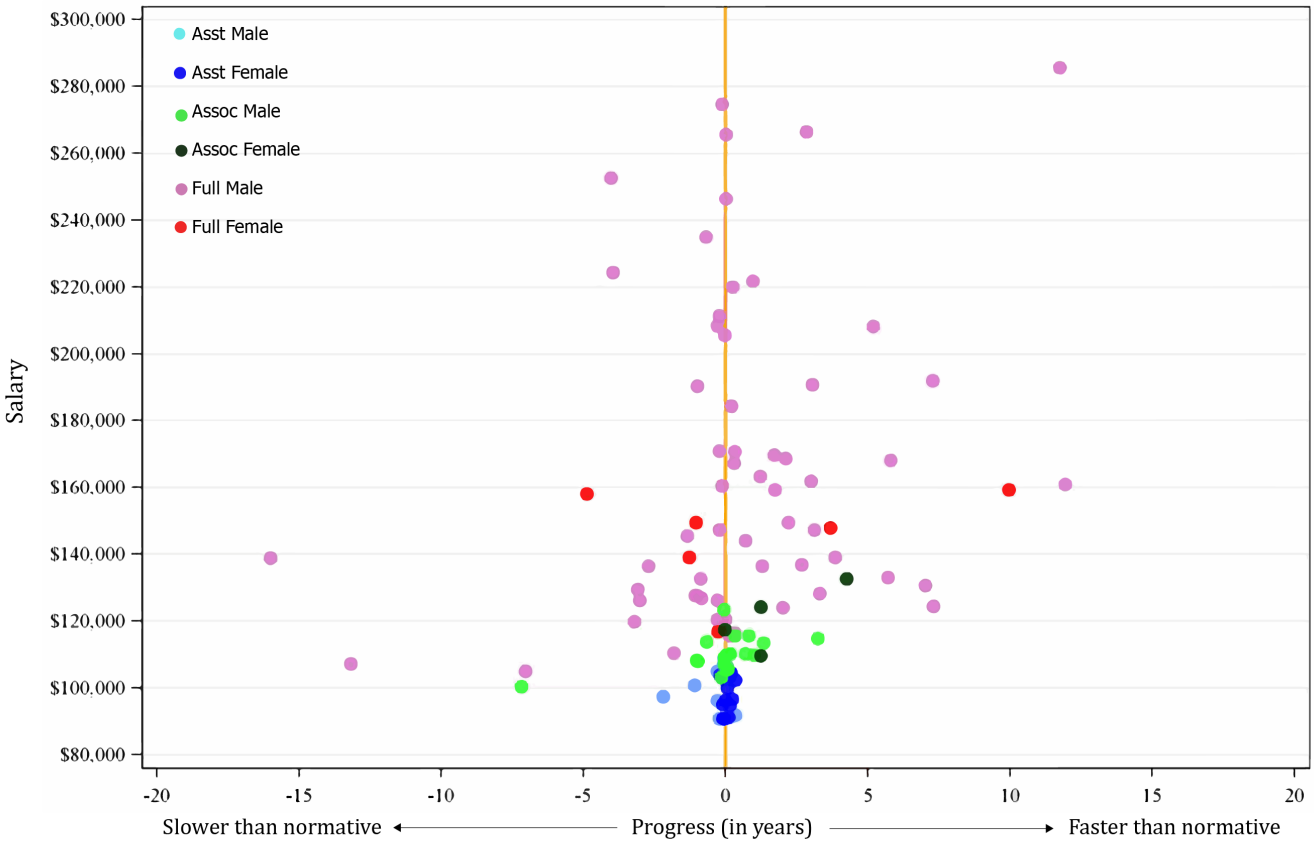
Submodel	R-sq	Significant Variables	Salary Difference		
			Women vs White Men	Asian vs White Men	URM vs White Men
1 Demography	0.10	Women**	-30.0%	4.9%	14.4%
2 Demography, Experience	0.74	URM**,Experience***	-5.8%	3.6%	16.3%
3 Demog, Exper, Field	0.75	URM**,Experience***	-4.5%	2.7%	18.1%
4 Demog, Exper,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

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

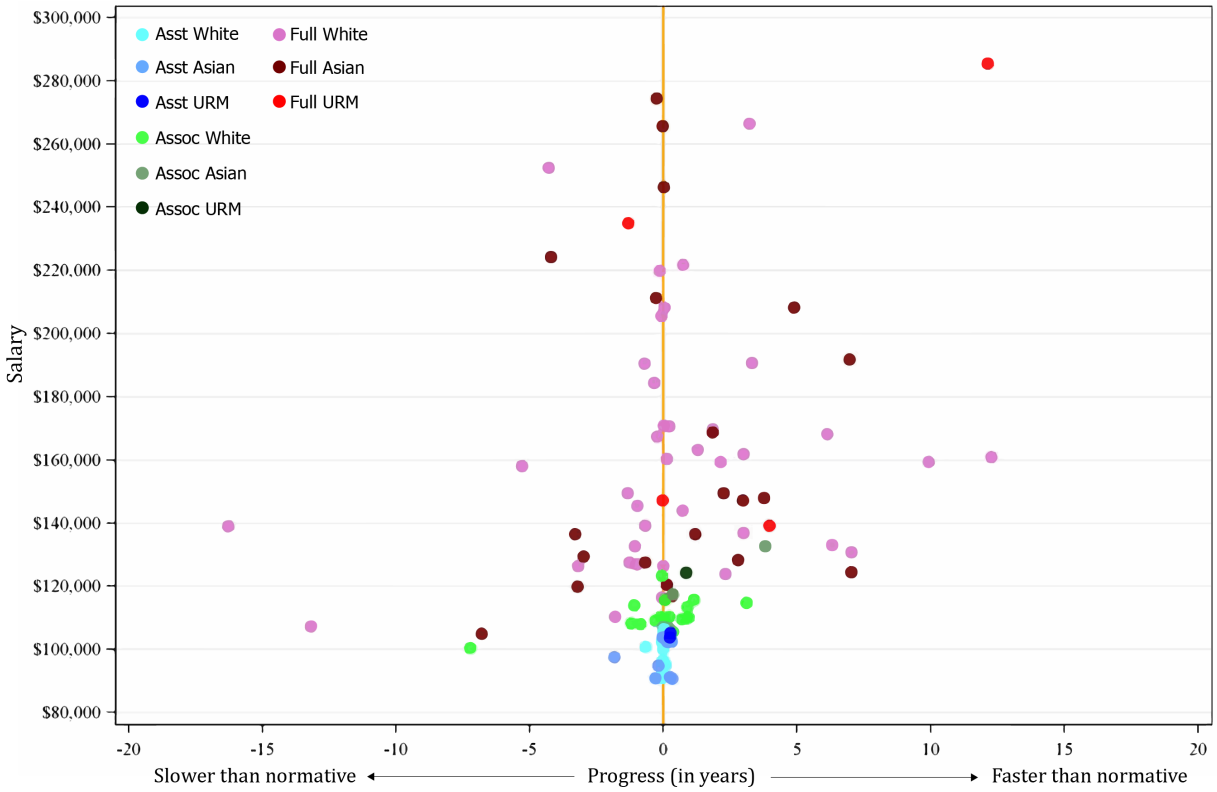
[1]Final model corrected for collinearity.

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

Graph 3: Salary by Progress and Gender - Engineering



Graph 4: Salary by Progress and Ethnicity - Engineering



4. Progress Rate Analysis: 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