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*Planning and Budget*

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.

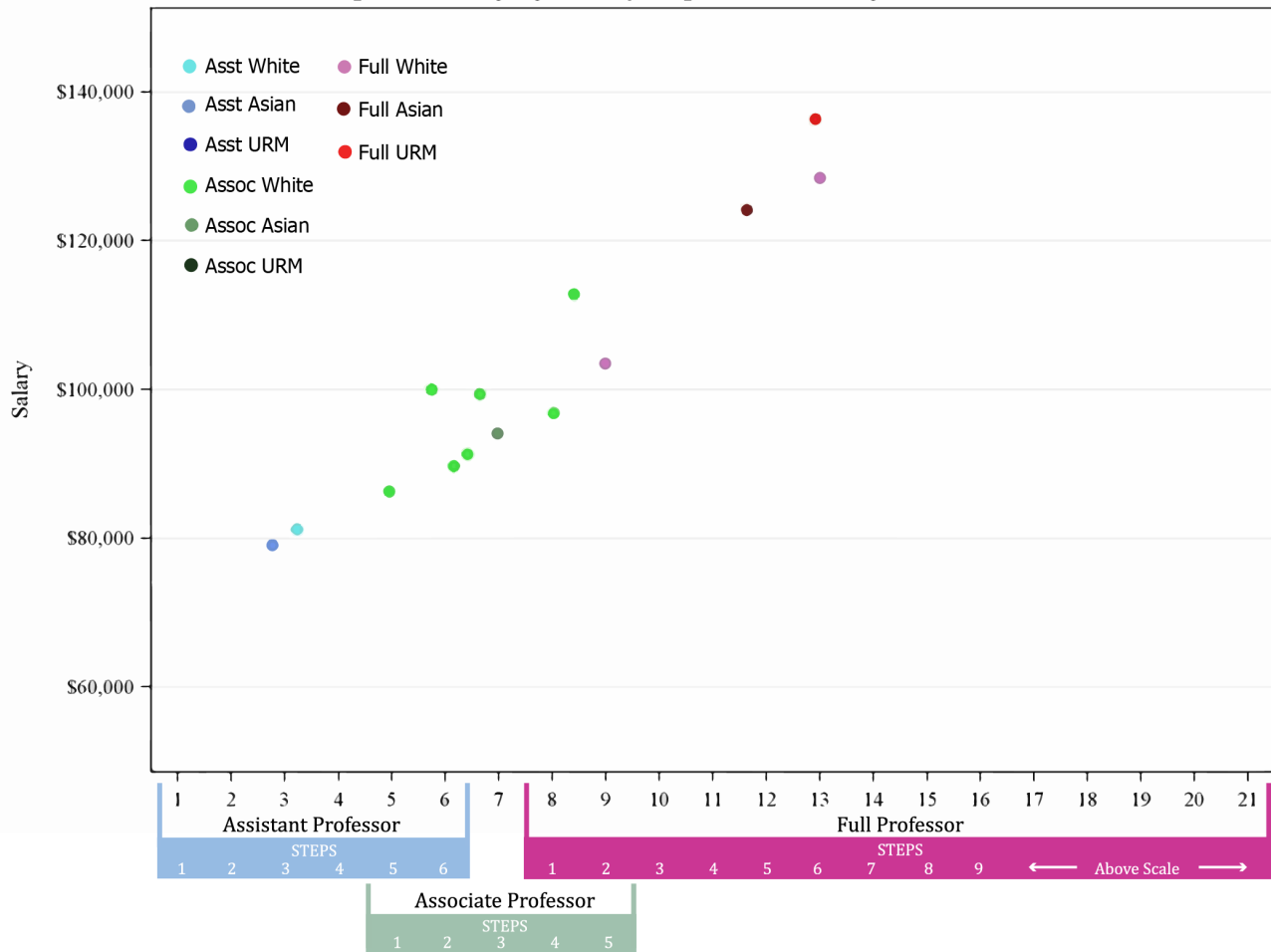## Methodology (see campus level report)

Results

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

Graph 1: Salary by Rank/Step and Gender - Public Health
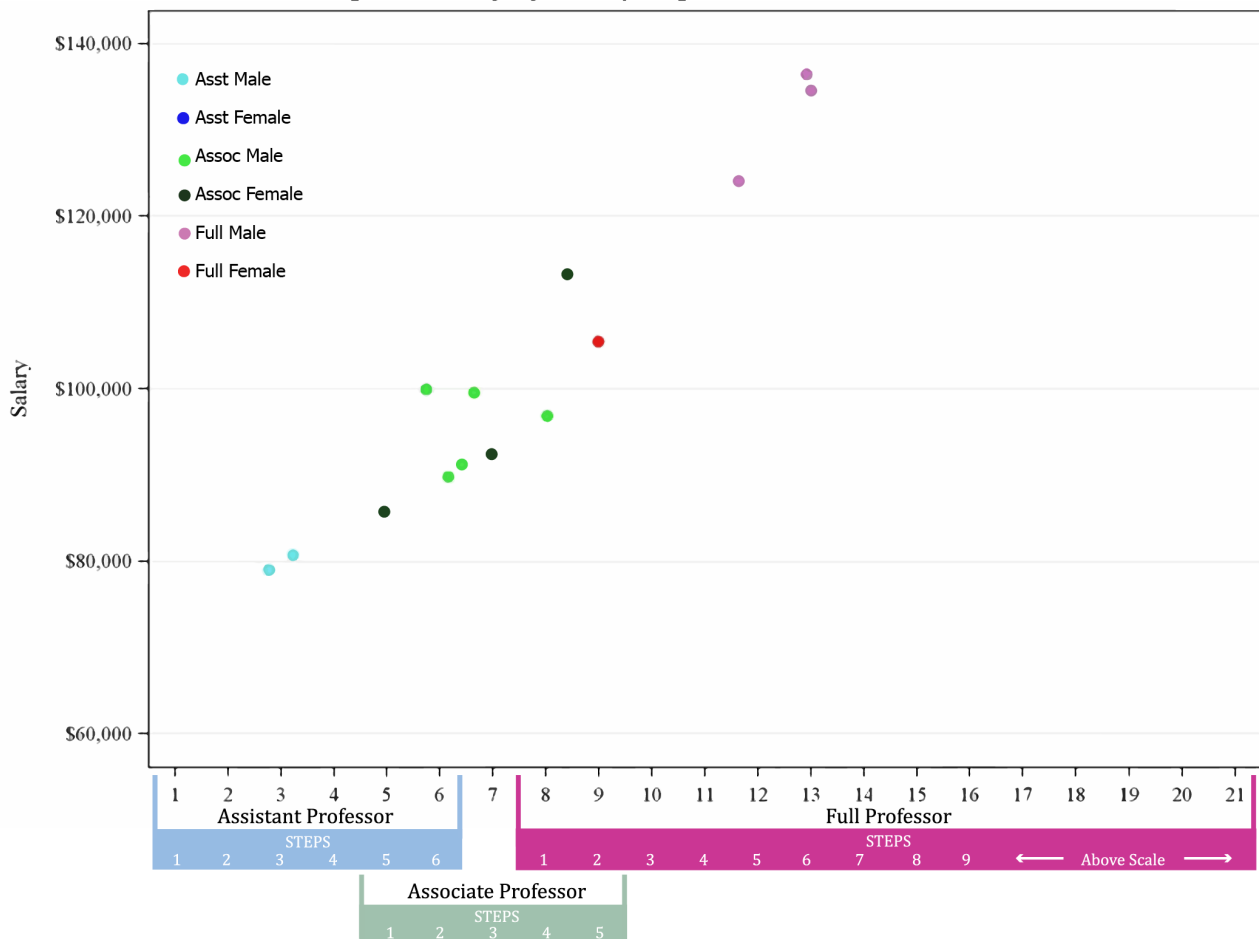
Graph 2: Salary by Rank/Step and Ethnicity- Public Health

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 36% lower, Asian and URM faculty earn 5% and 42% more, respectively, compared to their colleagues who are white and male. However, only 37% of salary variation is explained by this model. As control factors are added to the model, salary differences change significantly with women earning 14% more, Asian faculty earn 22% less, and URM faculty earn 2% less, compared to white male faculty. The percentage of salary variation explained by the model increases to 99%.
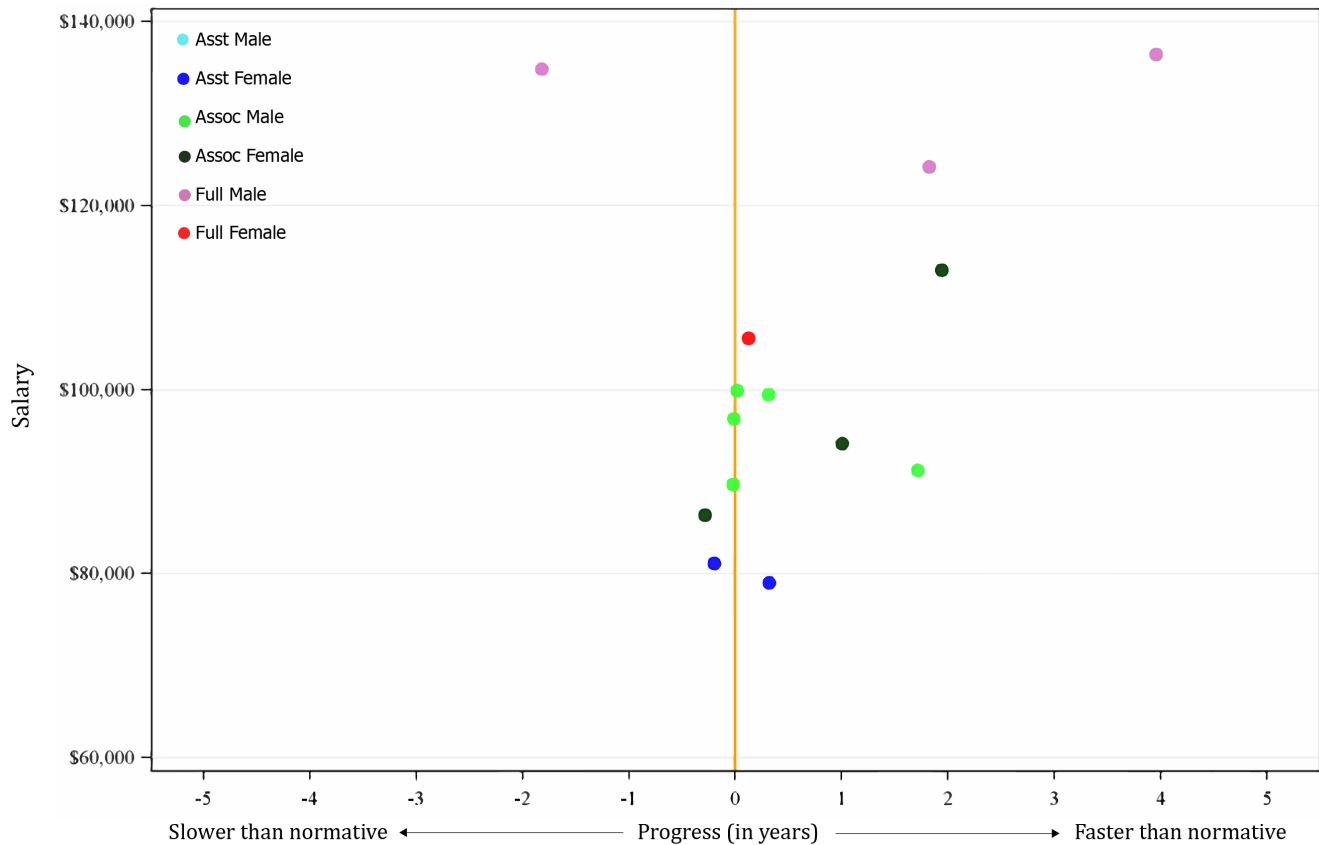
Table 1.

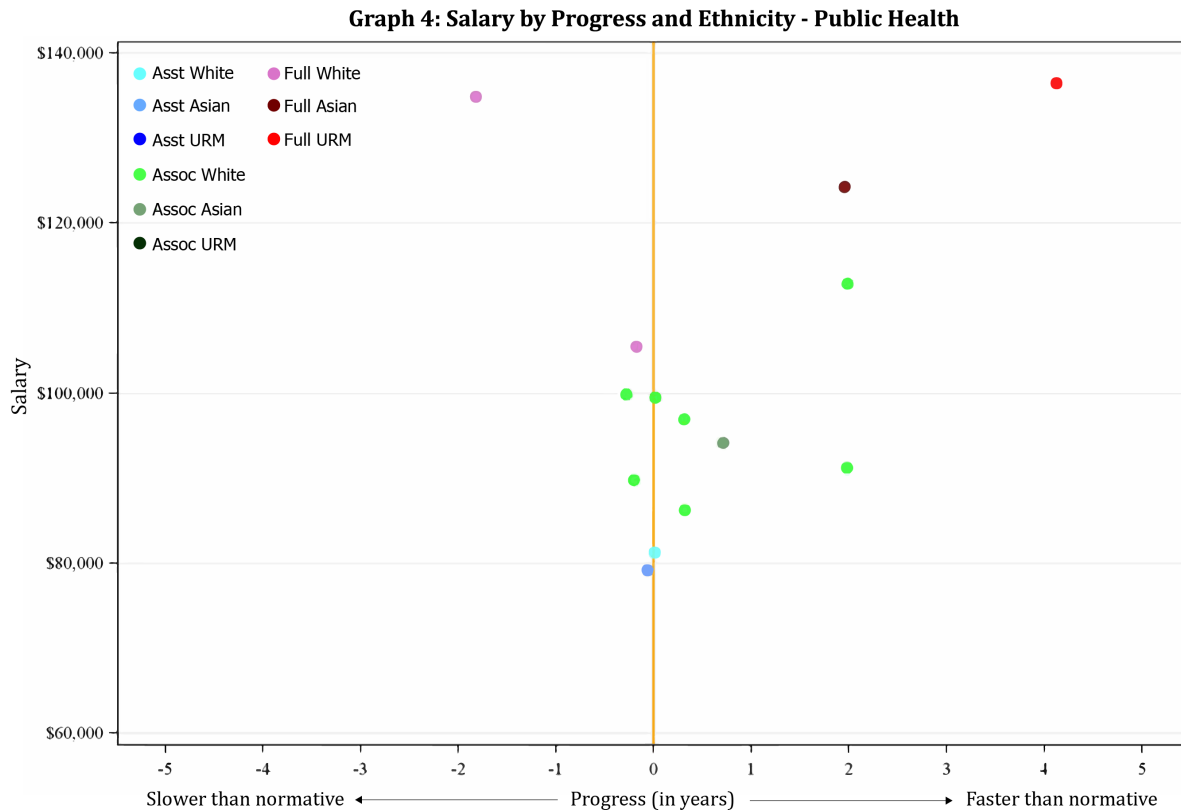|			Salary Difference		
Submodel	R-sq	Significant Variables	Women vs White Men	Asian vs White Men	URM vs White Men
1 Demography	0.37		-36.2%	4.5%	41.9%
2 Demography, Experience	0.80	Experience**	-13.5%	8.0%	22.3%
3 Demog, Exper, Field	0.89	Experience**	-1.9%	10.7%	66.3%
4 Demog, Exper, Field, Rank	0.99	Experience*	26.7%	-16.3%	17.9%
5 Demog, Exper, Field, Rank[1]	0.99	Rank*	14.0%	-22.3%	-1.8%

*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 - Public Health

Legend:
- Asst Male
- Asst Female
- Assoc Male
- Assoc Female
- Full Male
- Full Female

Y-axis: Salary ($60,000 to $140,000)
X-axis: Progress (in years), Slower than normative ← → Faster than normative

Graph 4: Salary by Progress and Ethnicity - Public Health

4. <u>Progress Rate Analysis</u>: The results indicate there isn't a statistically significant difference in progression rate means by gender when compared to white male faculty. URM faculty, however, progress at a rate that is four years faster (p=0.03).

Table 2. Progress Rate (in years) Comparison

Comparison	n	Mean	t	df	p-value	
White Male	6	0.00				
Women vs White Male	6	0.50	0.81	10	0.4381	
URM vs White Male	1	4.00	2.93	5	0.0327	
Asian vs White Male	3	1.00	1.18	7	0.2753	