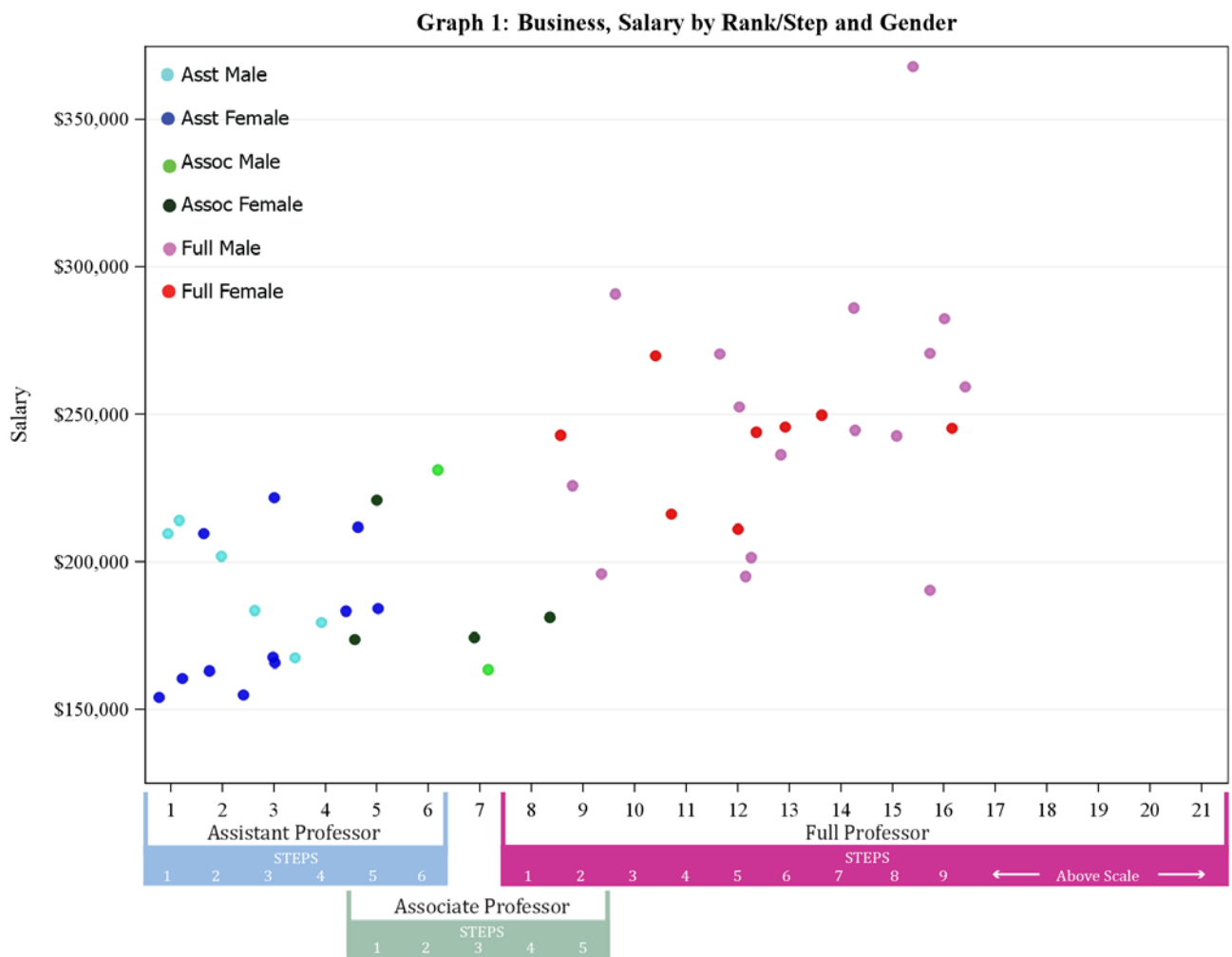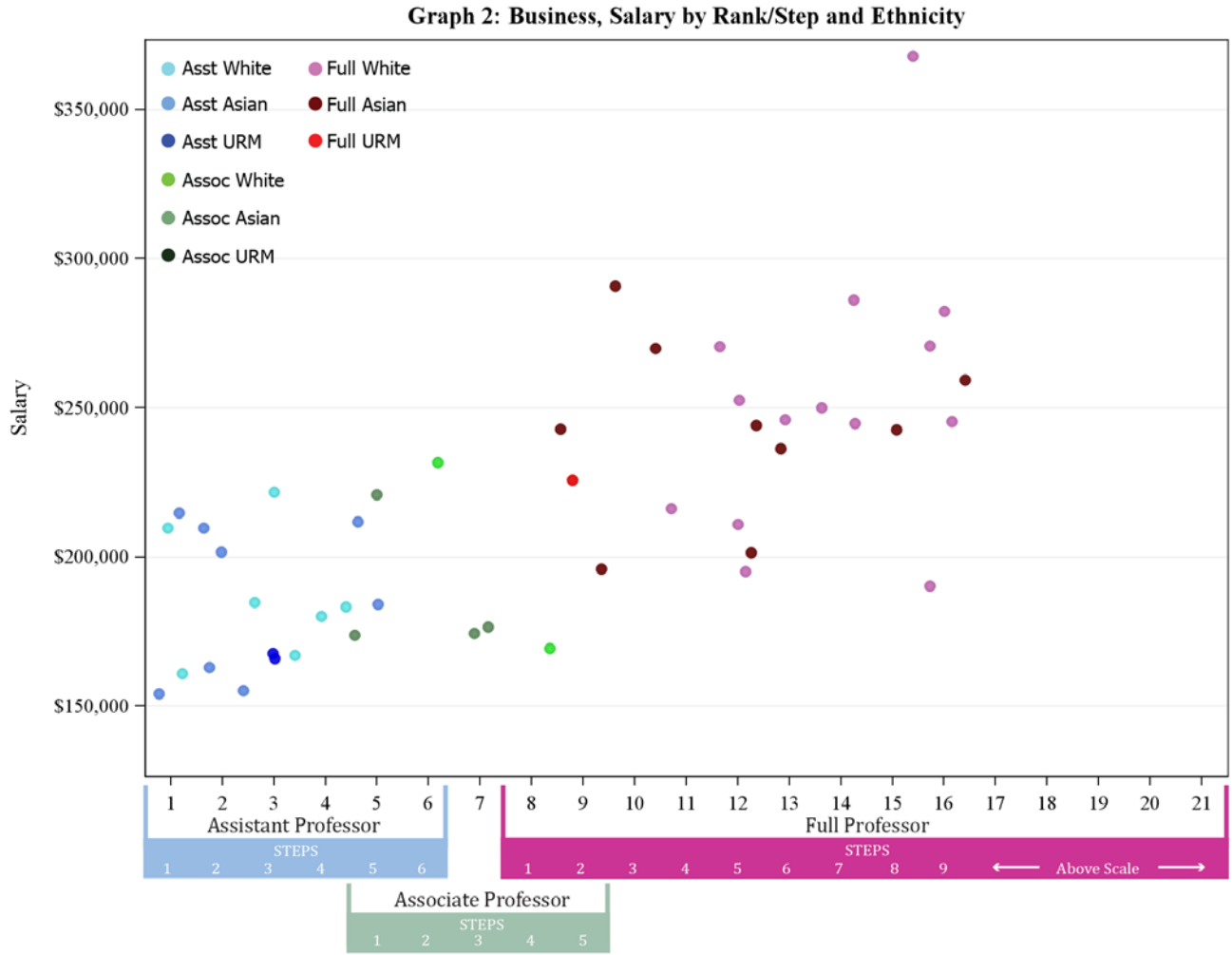## Overview

In 2015, a joint Administration-Academic Senate Committee redesigned our annual campus pay equity study of ladder rank faculty salaries. The analysis includes an examination of equity by gender and ethnicity for the campus overall and by academic school that go beyond the annual residual analysis conducted in the past (1997-2014). Analysis of salary data from October 2016 indicate 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

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

Graph 1: Business, Salary by Rank/Step and Gender

UCI Office of Institutional Research

Graph 2: Business, Salary by Rank/Step and Ethnicity

Legend:
- Asst White
- Asst Asian
- Asst URM
- Assoc White
- Assoc Asian
- Assoc URM
- Full White
- Full Asian
- Full URM

2. 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 11% lower, Asian faculty earn 5% and URM faculty earn 15% less. Only 17% of salary variation is explained by this model. After all control factors are added, 70% 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 1% higher for faculty who are women, 0.1% lower for Asian, and 17% lower for URM faculty. In this model, URM faculty earn significantly less than their white male counterparts. However it is worth noting that there were only three URM faculty in the School of Business.

Table 1.

| Submodel[1]	R-sq	Significant Variables	Salary Difference		
			Women vs White Men	Asian vs White Men	URM vs White Men
1 Demography	0.17	Women*	-11.4%	-5.3%	-14.7%
2 Demography, Experience	0.54	Experience***	-2.0%	1.3%	-15.2%
3 Demog, Exper, Field	0.67	URM*, Experience**, Market***	0.3%	-0.5%	-21.2%
4 Demog, Exper, Field, Rank	0.75	URM**, Experience**, Market*	-0.7%	0.4%	-20.9%
5 Demog, Exper, Field, Rank[2]	0.70	URM*, Market**, Rank**	1.3%	-0.1%	-17.2%

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

[1]Experience includes years of services, years since degree, 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.

[2]Final model corrected for collinearity.

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

Graph 3: Business, Salary by Progress and Gender

Graph 4: Business, Salary by Progress and Ethnicity
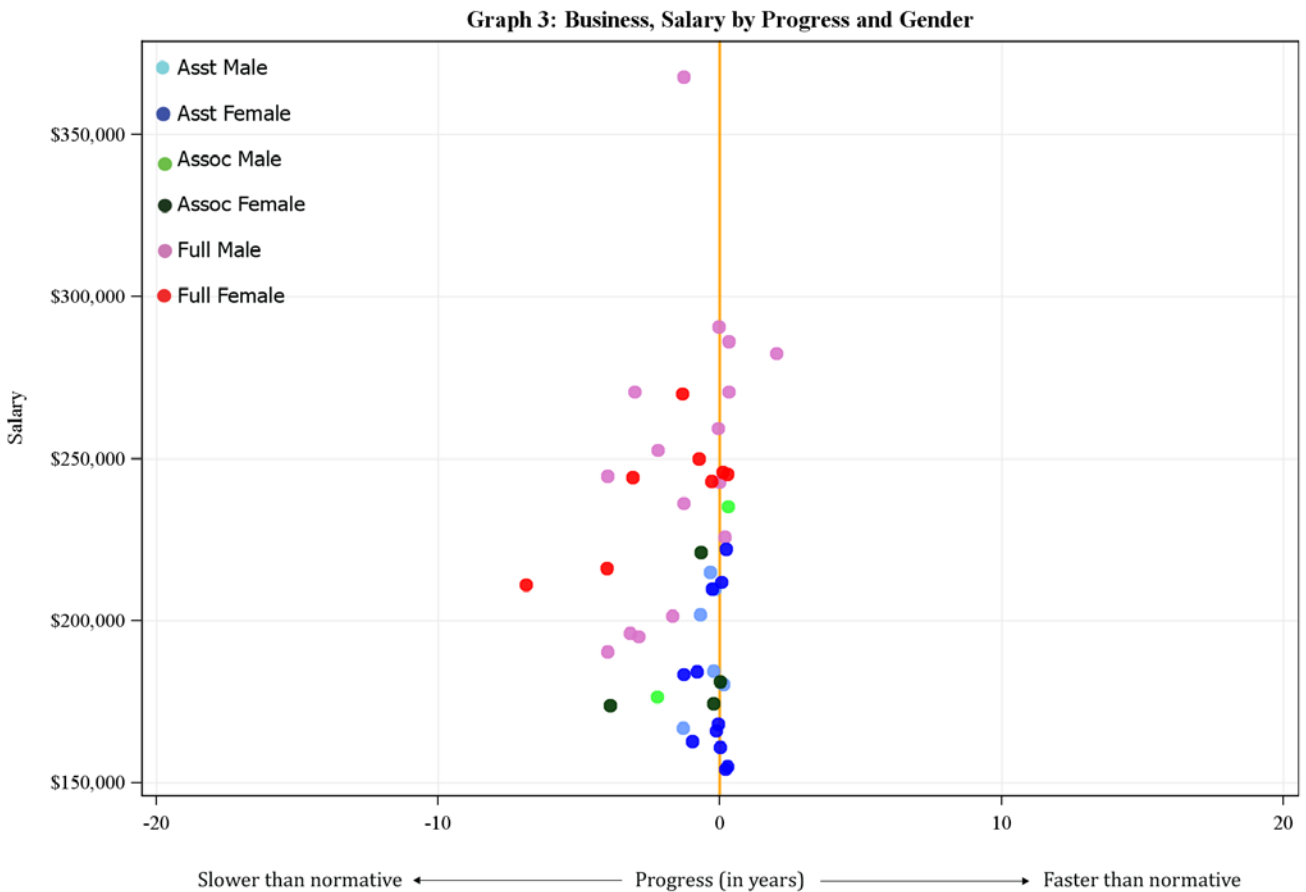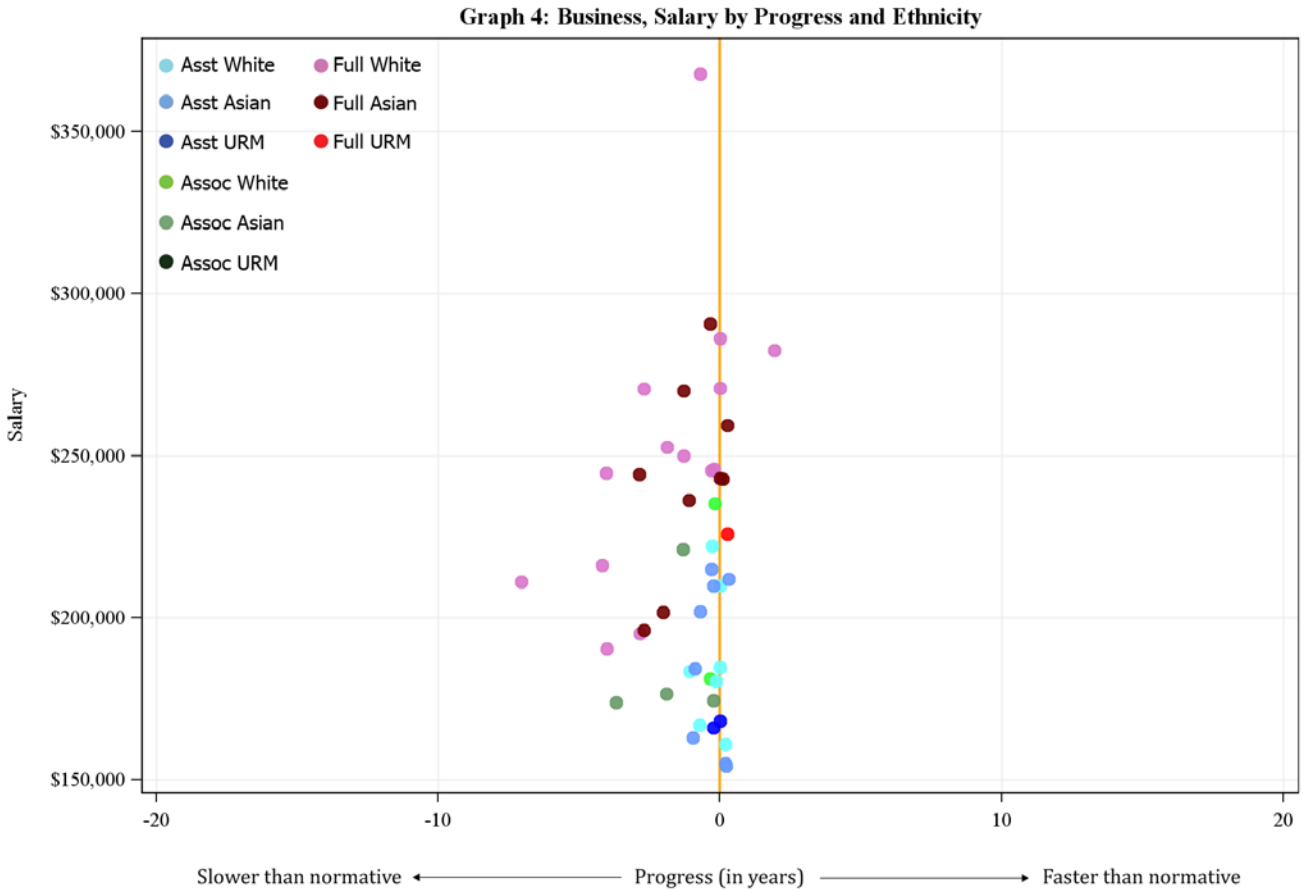
4. Progress Rate Analysis: Using a simple t-test, the results indicate that there is no statistically significant difference in progression rate means by gender when compared to white male faculty. However, URM faculty progress at a rate that is 1 year faster than white males (p = .033).

Progress Rate (in years) Comparison

Comparison	n	Mean	t	df	p-value
White Male vs	14	-1.14			
Women	23	-1.04	0.16	35	0.871
URM[a]	3	0.00	2.39	13	0.033
Asian	21	-0.95	0.38	33	0.708

[a]Homogeneity of variance assumption not met. Satterthwaite variance estimator used.