# Report to the Faculty Senate Compensation Committee Association of American Universities Data Exchange (AAUDE) 2006-07 Faculty Salary Survey by Discipline

### **About this Report**

The Association of American Universities Data Exchange (AAUDE) conducts an annual exchange of faculty salaries by rank and discipline. AAU has 62 members: 34 public and 26 private universities in the U.S., and two in Canada (Toronto and McGill). Institutions participating in the salary exchange for 2006-07 are listed below. Data are reported for the previous academic year because some private institutions are unable to share salary data until after an academic year has ended.

Data are collected using the federal government's CIP (Classification of Instructional Programs) taxonomy, the coding system used for reporting enrollments and degrees awarded. Programs included in the average salary calculations for each discipline correspond as much as possible to the program mix in the College of Arts and Sciences and professional schools at Case. All salaries have been converted to nine-month equivalents and may include non-tenure-track faculty.

### **Participating Universities**

PublicNebraskaCarnegie MellonArizonaNorth CarolinaCase

Case California (Berkeley) Ohio State Columbia California (Davis) Cornell Oregon California (Irvine) Duke Penn State California (Los Angeles) Pittsburgh **Emory** California (San Diego) **Purdue** Harvard California (Santa Barbara) **Rutgers Johns Hopkins** 

Colorado SUNY Buffalo MIT

Florida SUNY Stony Brook Northwestern

Georgia Tech¹TexasNYUIllinoisTexas A&MPennIndianaTorontoPrincetonIowaVirginiaRiceIowa StateWashingtonRochester

Kansas Wisconsin Southern California

Maryland Stanford Michigan **Private** Vanderbilt

Michigan State Brandeis Washington University

Minnesota Brown Yale

Missouri Caltech

<sup>&</sup>lt;sup>1</sup> Georgia Tech is not an AAU member, but participates in the exchange at AAUDE's invitation.

## **Faculty Salary Ratios by Rank and Discipline**

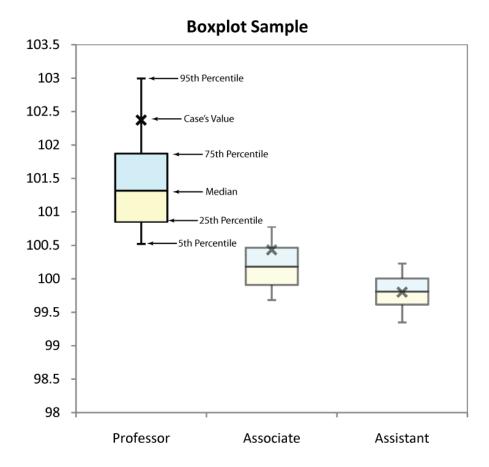
Case Average Compared to AAU Average Not Adjusted for Regional Cost of Living

	ı	Professo	r	P	Associat	е	A	Assistan	t
	AY05	AY06	AY07	AY05	AY06	AY07	AY05	AY06	AY07
Humanities	0.77	0.78	0.74	0.93	0.93	0.91	0.97	1.01	0.92
Social Sciences	0.82	0.79	0.84	0.90	0.89	0.86	0.92	0.92	0.87
Visual and Performing Arts	0.90	0.91	0.89	0.99	1.00	0.99	1.11	1.13	0.99
Math and Natural Sciences	0.86	0.83	0.80	0.94	0.99	0.96	0.93	0.94	0.90
Engineering and Computer Science	0.92	0.92	0.95	0.94	0.95	0.92	0.98	0.97	0.95
Management	0.94	0.91	0.89	0.94	0.94	0.91	0.99	0.96	1.00
Nursing	1.05	1.17	1.08	1.13	1.15	1.05	0.97	0.93	0.93
Dental Medicine	0.74	0.78	0.90	0.88	0.95	0.85	0.84	0.86	0.79
Law	0.90	0.91	0.90	1.06	1.10	0.98	0.98	0.98	1.08
Social Work	1.10	1.13	1.08	1.14	1.11	1.07	1.13	0.97	1.01
Biomedical Sciences	1.02	1.04	1.07	0.95	0.96	0.91	0.85	0.86	0.90

A value of .75 means that the Case average salary is 75% of the AAU average for a given rank and disciplinary group.

## **Boxplots**

Previous reports to the Compensation Committee have compared the Case average salary to the AAU average by rank and disciplinary group, as shown above. In addition to the ratio comparisons, this year's report includes boxplots to show the relative position of Case's average salary by rank and discipline within the group of AAU universities.



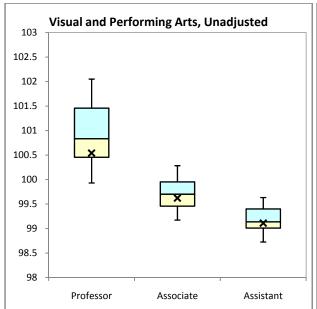
In the above example, the line splitting the box is the median salary for those at a given rank within a given discipline. The top section of the box represents the 50<sup>th</sup> to 75<sup>th</sup> percentile, and the bottom section represents the 50<sup>th</sup> to 25<sup>th</sup> percentile. The top and bottom "whiskers" represent the 95<sup>th</sup> and 5<sup>th</sup> percentiles, respectively. In other words, 50% of the sample is captured by the box, and 90% of the sample is between the two whiskers. Case's value within this distribution is marked with an "X."

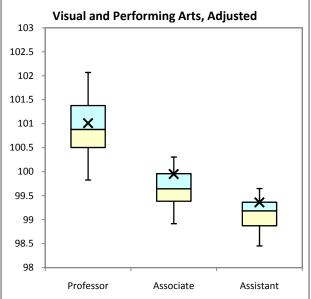
Additionally, please note that salary values have been standardized to 100. This means that within each disciplinary group, the mean of all values is equal to 100, and the standard deviation is 1. In the above example, Case's value for full professors is approximately 102.25, meaning that the salary for Case professors in this particular discipline is 2.25 standard deviations above the mean. Associate Professors have salaries that are approximately .5 standard deviations above the mean, and Assistant Professors are paid at or slightly below the mean for this particular discipline.

#### **Cost of Living Adjustment**

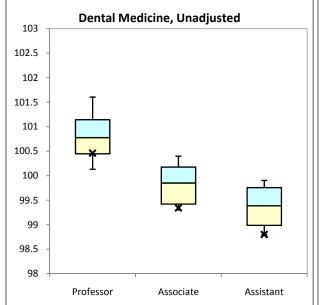
In order to more accurately compare the salaries of faculty at schools in different regions, AAUDE contracted with Runzheimer International to develop a cost-of-living index for each of its institutions. Runzheimer is a management consulting firm specializing in data research and is a leading provider of cost-of-living information to corporate, government, and nonprofit clients.

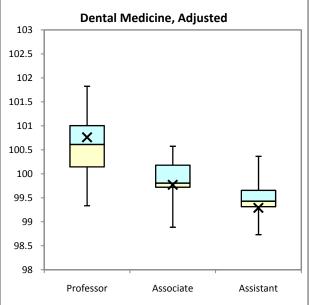
The cost-of-living index is comprehensive and is based on the regional cost of four primary factors: taxes, transportation, housing, and goods, services, and other expenses. Cost calculations assume a family of four that owns a home and has an annual income of \$100,000. The values for each city are then compared to the national average, producing a ratio that can be used to adjust salary values. This report presents both the adjusted and unadjusted values.



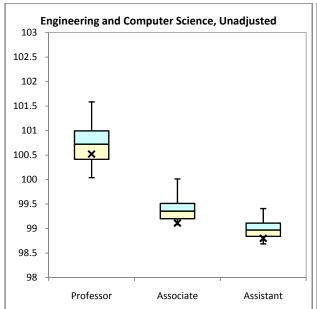


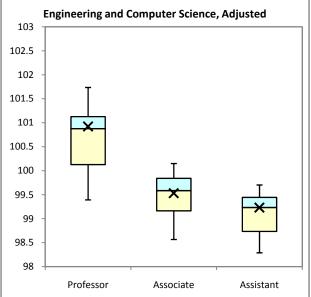
	Unadjusted			Adjusted		
Arts	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	0.89	0.99	0.99	1.01	1.08	1.08
Percentile	31 <sup>st</sup>	39 <sup>th</sup>	43 <sup>rd</sup>	60 <sup>th</sup>	72 <sup>nd</sup>	74 <sup>th</sup>



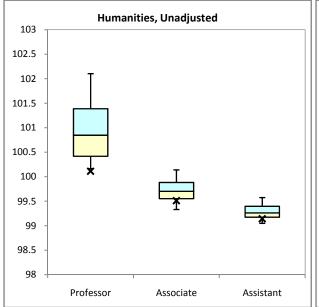


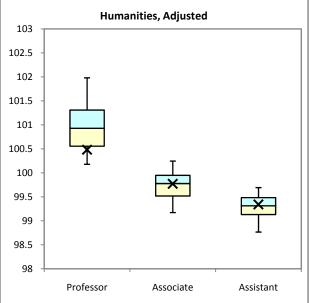
		Unadjusted		Adjusted		
<b>Dental Medicine</b>	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	0.90	0.85	0.79	1.03	0.99	0.90
Percentile	31 <sup>st</sup>	8 <sup>th</sup>	8 <sup>th</sup>	54 <sup>th</sup>	46 <sup>th</sup>	23 <sup>rd</sup>



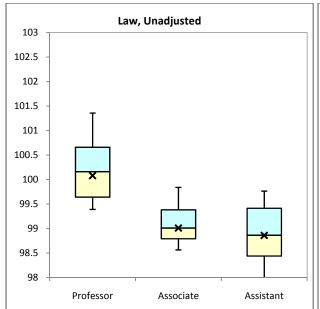


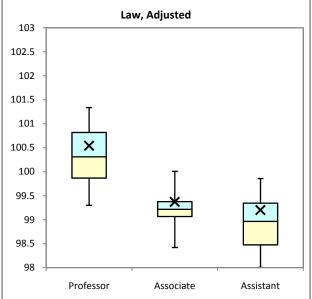
	Unadjusted			Adjusted		
Engineering	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	0.95	0.92	0.95	1.07	1.00	1.03
Percentile	30 <sup>th</sup>	13 <sup>th</sup>	14 <sup>th</sup>	57 <sup>th</sup>	42 <sup>nd</sup>	50 <sup>th</sup>



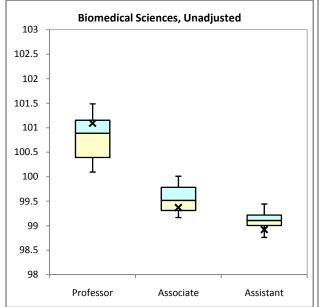


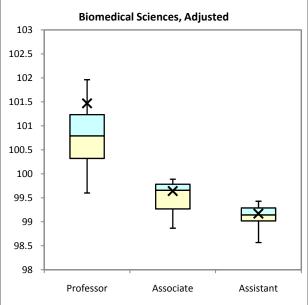
	Unadjusted			Adjusted		
Humanities	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	0.74	0.91	0.92	0.86	1.01	1.02
Percentile	4 <sup>th</sup>	18 <sup>th</sup>	14 <sup>th</sup>	19 <sup>th</sup>	47 <sup>th</sup>	54 <sup>th</sup>



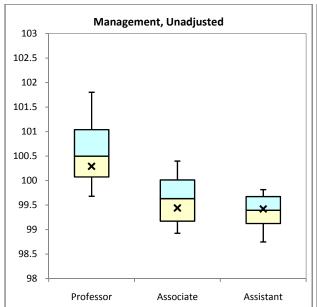


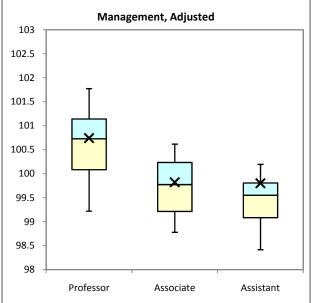
		Unadjusted		Adjusted			
Law	Professor	Associate	Assistant	Professor	Associate	Assistant	
Ratio	0.90	0.98	1.08	1.03	1.09	1.26	
Percentile	48 <sup>th</sup>	50 <sup>th</sup>	50 <sup>th</sup>	58 <sup>th</sup>	75 <sup>th</sup>	68 <sup>th</sup>	



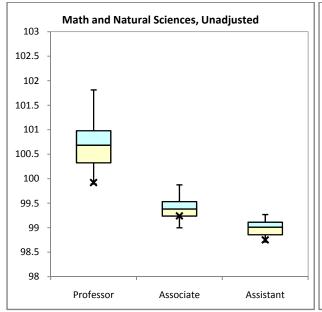


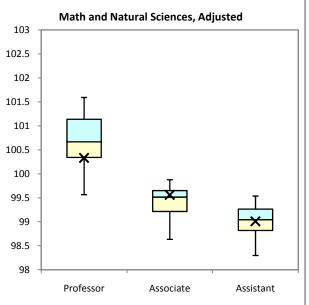
	Unadjusted			Adjusted		
<b>Medical Sciences</b>	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	1.07	0.91	0.90	1.22	1.01	0.99
Percentile	74 <sup>th</sup>	32 <sup>nd</sup>	21 <sup>st</sup>	89 <sup>th</sup>	47 <sup>th</sup>	58 <sup>th</sup>



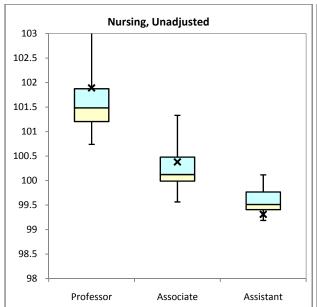


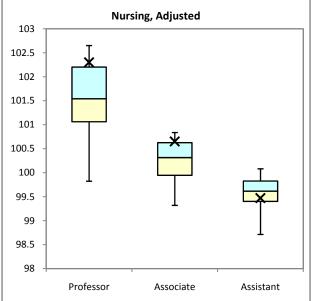
	Unadjusted			Adjusted		
Management	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	0.89	0.91	1.00	1.03	1.02	1.13
Percentile	40 <sup>th</sup>	34 <sup>th</sup>	56 <sup>th</sup>	51 <sup>st</sup>	57 <sup>th</sup>	74 <sup>th</sup>



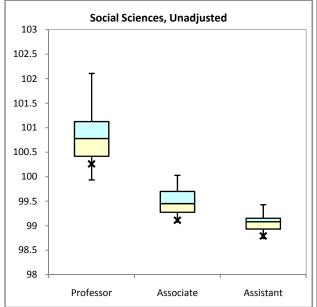


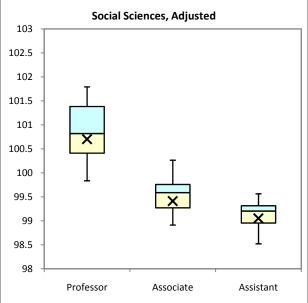
		Unadjusted		Adjusted		
Math / Science	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	0.80	0.96	0.90	0.92	1.05	0.99
Percentile	7 <sup>th</sup>	26 <sup>th</sup>	9 <sup>th</sup>	24 <sup>th</sup>	57 <sup>th</sup>	45 <sup>th</sup>



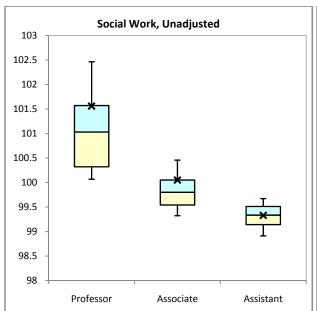


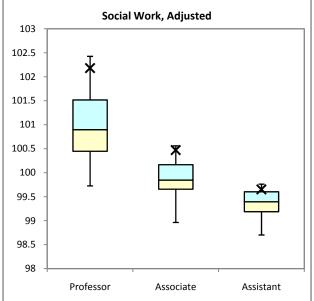
	Unadjusted			Adjusted		
Nursing	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	1.08	1.05	0.93	1.19	1.12	0.97
Percentile	79 <sup>th</sup>	65 <sup>th</sup>	19 <sup>th</sup>	83 <sup>rd</sup>	81 <sup>st</sup>	38 <sup>th</sup>





	Unadjusted			Adjusted		
<b>Social Sciences</b>	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	0.84	0.86	0.87	0.98	0.96	0.97
Percentile	16 <sup>th</sup>	9 <sup>th</sup>	11 <sup>th</sup>	42 <sup>nd</sup>	32 <sup>nd</sup>	39 <sup>th</sup>





	Unadjusted			Adjusted		
Social Work	Professor	Associate	Assistant	Professor	Associate	Assistant
Ratio	1.08	1.07	1.01	1.28	1.23	1.12
Percentile	71 <sup>st</sup>	75 <sup>th</sup>	48 <sup>th</sup>	88 <sup>th</sup>	92 <sup>nd</sup>	78 <sup>th</sup>

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