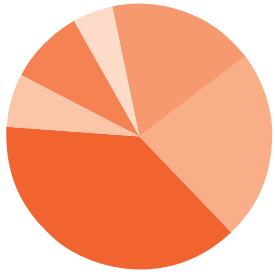
ANNUAL SURVEY



2016–2017 Faculty Salaries Report

Amanda L. Golbeck, Thomas H. Barr, and Colleen A. Rose

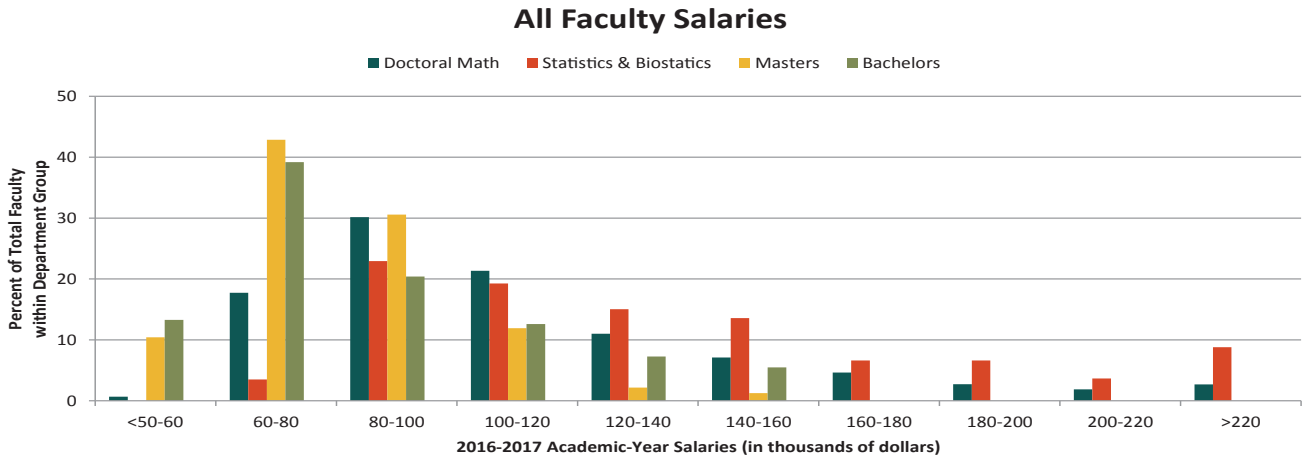
This salary report is one part of the Annual Survey of Mathematical Sciences, a nation-wide survey administered by the AMS on behalf of the American Statistical Association (ASA), the Institute for Mathematical Statistics (IMS), the Mathematical Association of America (MAA), and the Society for Industrial and Applied Mathematics (SIAM). It provides a look at the salaries of faculty in the Mathematical Sciences in the US by rank in several different department groupings based on discipline, highest degree offered, and graduate counts. The graphs here are identified by those group names, and the group definitions are given at the end of the report.

Departments were asked to report for each rank the number of tenured and tenure-track faculty whose 2016–17 academic-year salaries fell within given salary intervals. Reporting salary data in this fashion ensures confidentiality of individual responses, though it does mean that the reported quartiles are only approximations. The quartiles reported have been estimated assuming that the density over each interval is uniform

Note: the percentages scales for the Masters and Bachelors Groups range from 0 to 50, while the scale for all other groups is 0 to 100.

Faculty Salary Reports from prior years are at `www.ams.org/annual-survey/salaries`. Interpretation of historical trends should be made with some care. For instance, one factor influencing changes in the mean of reported salaries year to year may be differences in the set of responding departments within the groups.

The first graphic below provides a coarse comparative view of faculty salaries among four broad groups: departments whose highest degree is a (1) PhD in mathematics (including applied mathematics departments), (2) masters degree in mathematics, (3) PhD in statistics or biostatistics, and (4) bachelors degree in mathematics. In the remainder of this report, salary distributions are broken down within finer departmental categories and by faculty rank.



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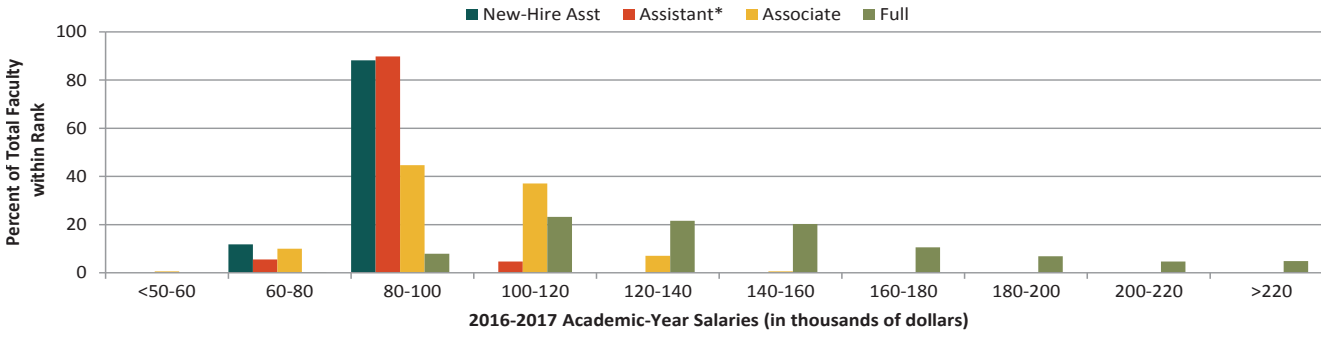
Math Public Large Group Faculty Salaries

16 responses out of 26 departments (62%)

Rank	Gender	2016-17 No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	All	17	86,300	90,700	93,900	88,201	89,208
	Male	13	86,900	91,700	95,600	88,832	
	Female	4	85,800	87,500	91,300	86,150	
Assistant Professor*	All	108	86,700	90,900	94,000	90,230	89,392
	Male	81	86,300	90,900	94,100	90,209	
	Female	27	87,300	90,800	93,800	90,293	
Associate Professor	All	170	89,300	98,300	107,400	97,877	95,248
	Male	127	87,500	98,800	108,500	98,039	
	Female	43	91,500	96,900	105,000	97,402	
Full Professor	All	557	115,100	137,500	163,700	144,661	142,435
	Male	503	115,300	137,600	163,700	145,099	
	Female	54	113,800	135,000	165,000	140,581	

* Includes New Asst Professors

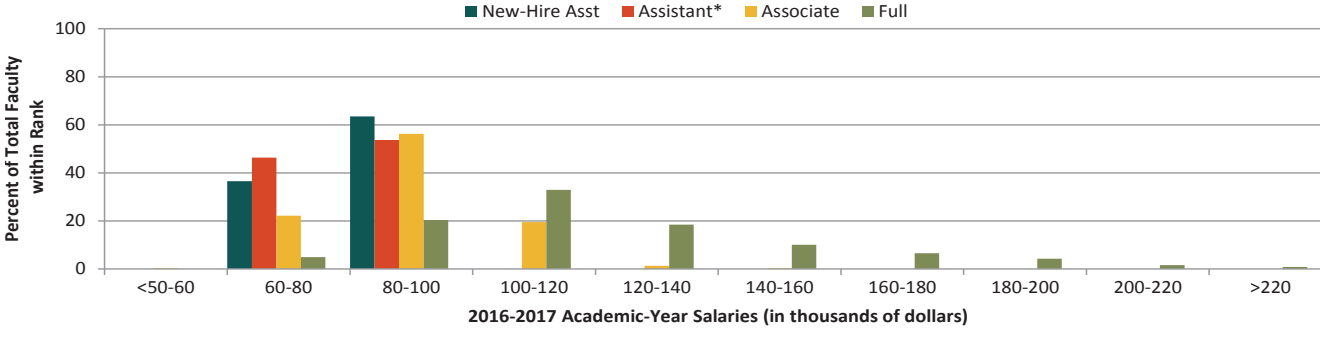


Math Public Medium Group Faculty Salaries

34 responses out of 40 departments (85%)

Rank	Gender	2016-17 No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	All	52	76,800	82,100	86,800	81,135	79,866
	Male	37	76,900	81,600	84,500	80,271	
	Female	15	74,000	86,300	92,500	83,267	
Assistant Professor*	All	233	76,000	80,900	87,200	80,982	78,609
	Male	166	76,600	81,600	87,400	81,419	
	Female	67	74,200	78,800	86,700	79,899	
Associate Professor	All	302	80,900	88,600	98,500	89,848	86,155
	Male	225	80,100	87,600	97,000	88,374	
	Female	77	83,100	93,300	103,600	94,155	
Full Professor	All	613	99,700	114,600	137,400	120,906	119,308
	Male	556	100,100	114,900	137,700	121,531	
	Female	57	96,900	111,400	133,800	114,804	

* Includes New Asst Professors

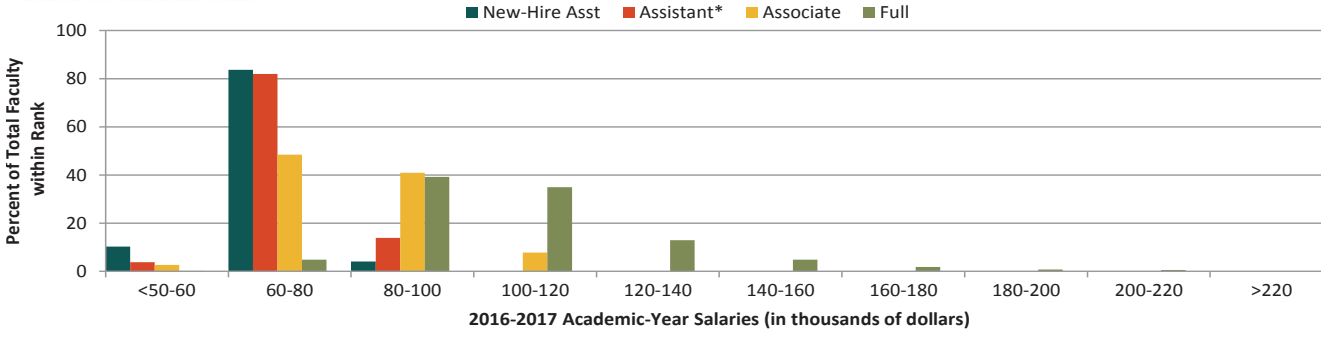


Math Public Small Group Faculty Salaries

46 responses out of 68 departments (68%)

Rank	Gender	2016-17 No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	All	49	65,200	70,300	74,500	68,552	70,709
	Male	30	66,300	71,300	75,600	68,747	
	Female	19	62,500	68,300	73,300	68,245	
Assistant Professor*	All	238	66,900	71,900	76,900	72,019	70,395
	Male	169	66,600	71,700	76,700	71,720	
	Female	69	67,700	72,400	77,700	72,750	
Associate Professor	All	347	72,700	79,600	85,900	80,415	78,273
	Male	247	72,600	80,200	86,700	80,966	
	Female	100	73,100	78,800	84,200	79,052	
Full Professor	All	556	91,100	103,000	117,300	116,357	106,243
	Male	468	91,300	104,100	118,800	120,080	
	Female	88	90,800	99,000	107,900	96,558	

* Includes New Asst Professors

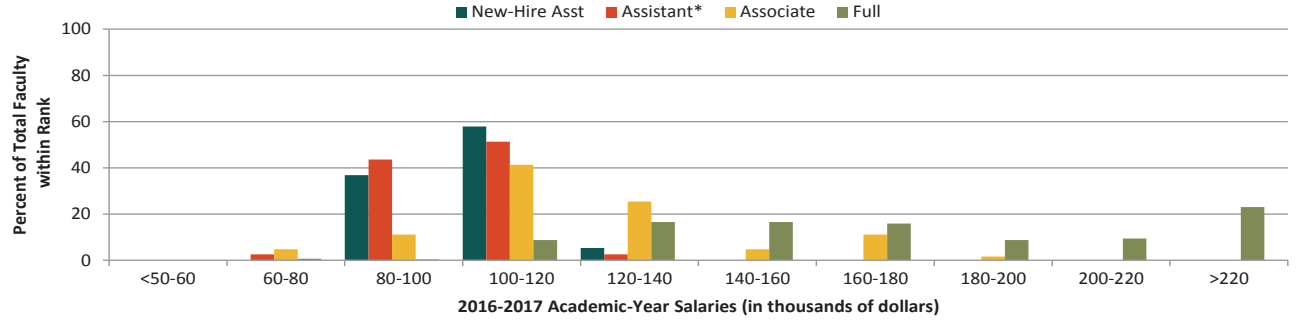


Math Private Large Group Faculty Salaries

15 responses out of 23 departments (65%)

Rank	Gender	2016-17 No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	All	19	90,000	103,300	108,900	99,841	91,500
	Male	14	92,500	103,100	107,500	88,832	
	Female	5	96,300	105,000	115,000	86,150	
Assistant Professor*	All	78	90,800	101,000	106,600	97,863	94,674
	Male	60	91,000	100,900	106,300	90,209	
	Female	18	90,000	101,900	107,500	90,293	
Associate Professor	All	63	103,300	115,000	133,800	119,792	113,966
	Male	55	104,700	117,800	136,300	98,039	
	Female	278	92,500	103,800	112,500	97,402	
Full Professor	All	308	138,500	167,800	215,700	178,954	174,059
	Male	18	139,600	169,000	216,400	145,099	
	Female	30	134,300	152,500	205,000	140,581	

* Includes New Asst Professors

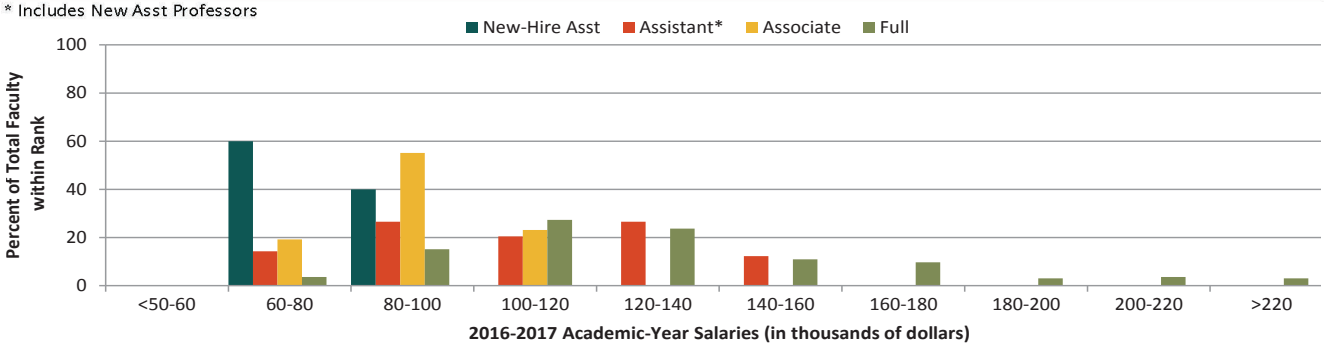


Math Private Small Group Faculty Salaries

14 responses out of 28 departments (50%)

Rank	Gender	No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	All	5	75,800	78,300	92,500	82,600	81,786
	Male	3	72,500	91,700	93,300	86,333	
	Female	2	76,700	77,500	78,300	77,000	
Assistant Professor*	All	49	77,800	84,100	92,500	84,908	82,900
	Male	36	80,300	85,900	92,500	85,529	
	Female	13	77,200	79,400	92,500	83,188	
Associate Professor	All	78	81,400	88,900	98,800	89,683	88,662
	Male	62	82,200	88,800	98,600	89,582	
	Female	16	78,100	90,600	101,700	90,074	
Full Professor	All	165	103,800	122,600	146,300	122,420	128,202
	Male	151	103,200	122,500	146,200	132,750	
	Female	14	107,500	123,800	146,700	128,027	

* Includes New Asst Professors

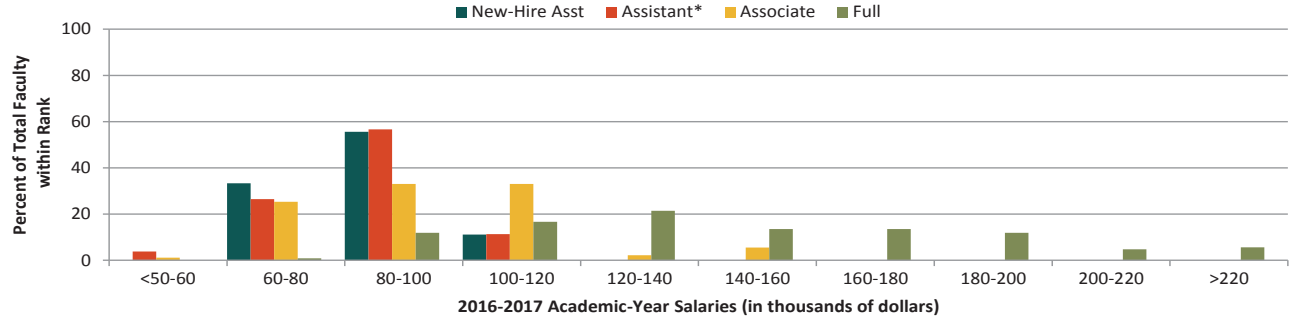


Applied Mathematics Group Faculty Salaries

15 responses out of 20 departments (75%)

Rank	Gender	No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	All	9	77,500	87,500	96,300	85,611	80,857
	Male	7	77,500	91,700	97,500	88,832	
	Female	2	77,500	86,300	87,500	86,150	
Assistant Professor*	All	53	76,300	88,200	95,300	85,570	83,502
	Male	41	71,900	88,300	95,400	90,209	
	Female	12	85,400	87,900	95,800	90,293	
Associate Professor	All	91	78,600	95,900	106,500	94,766	91,449
	Male	78	80,600	97,300	107,100	98,039	
	Female	13	76,900	83,300	101,700	97,402	
Full Professor	All	126	115,700	138,800	176,000	149,211	140,370
	Male	111	114,600	139,100	177,100	145,099	
	Female	15	122,500	136,700	175,000	140,581	

* Includes New Asst Professors



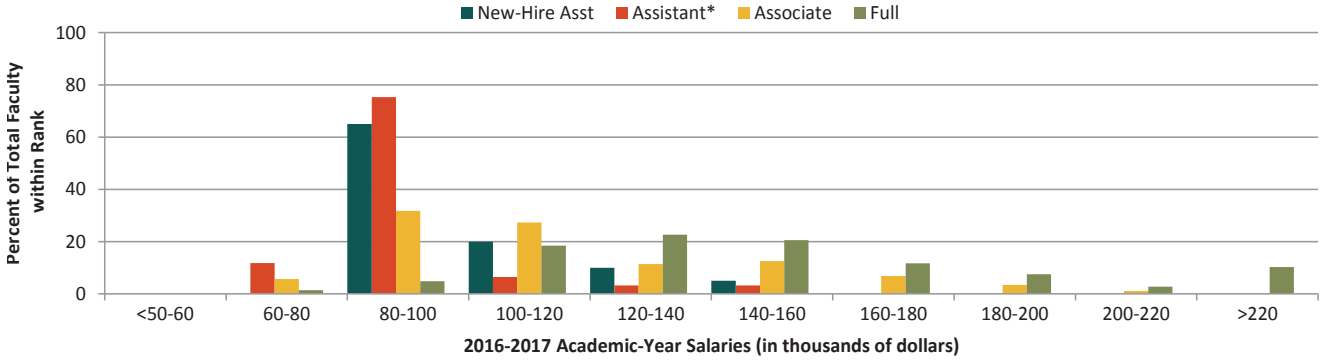
Statistics Group Faculty Salaries**

23 responses out of 59 departments (39%)

Rank	Gender	No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	All	20	91,300	93,800	113,800	107,069	86,696
	Male	15	91,100	93,300	105,000	105,888	
	Female	5	91,300	113,300	152,500	110,614	
Assistant Professor*	All	93	85,300	90,600	93,800	93,342	93,385
	Male	66	85,700	90,800	93,900	93,609	
	Female	27	83,800	89,400	93,500	92,688	
Associate Professor	All	88	94,400	106,400	137,000	115,774	99,752
	Male	66	94,500	107,500	142,000	116,697	
	Female	22	93,800	103,000	125,000	113,005	
Full Professor	All	146	120,600	142,300	171,300	127,997	153,770
	Male	120	122,300	144,400	174,200	155,729	
	Female	26	116,000	127,900	155,000	135,550	

* Includes New Asst Professors

**Faculty salary data provided by the American Statistical Association.



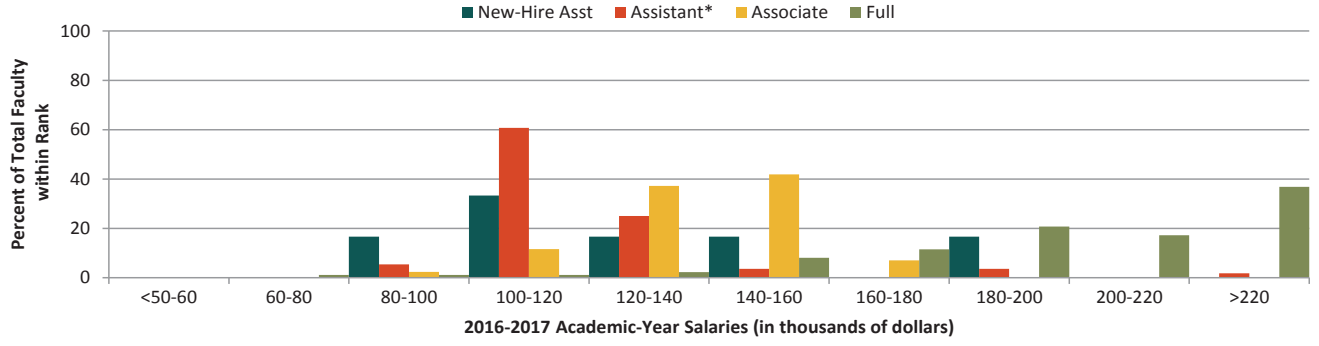
Biostatistics Group Faculty Salaries**

13 responses out of 46 departments (28%)

Rank	Gender	No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	All	12	103,800	121,700	152,500	138,083	86,117
	Male	8	105,000	122,500	181,700	135,241	
	Female	4	102,500	127,500	142,500	143,767	
Assistant Professor*	All	56	104,000	108,800	125,000	119,654	85,582
	Male	40	104,300	109,300	127,200	120,321	
	Female	16	103,500	107,500	116,300	117,987	
Associate Professor	All	43	124,500	138,600	146,500	136,634	104,780
	Male	32	122,800	133,600	145,000	134,892	
	Female	11	141,100	144,400	147,800	141,705	
Full Professor	All	87	177,500	204,400	223,300	203,724	167,082
	Male	73	173,800	203,800	223,100	200,282	
	Female	14	185,000	212,500	224,300	221,670	

* Includes New Asst Professors

**Faculty salary data provided by the American Statistical Association.

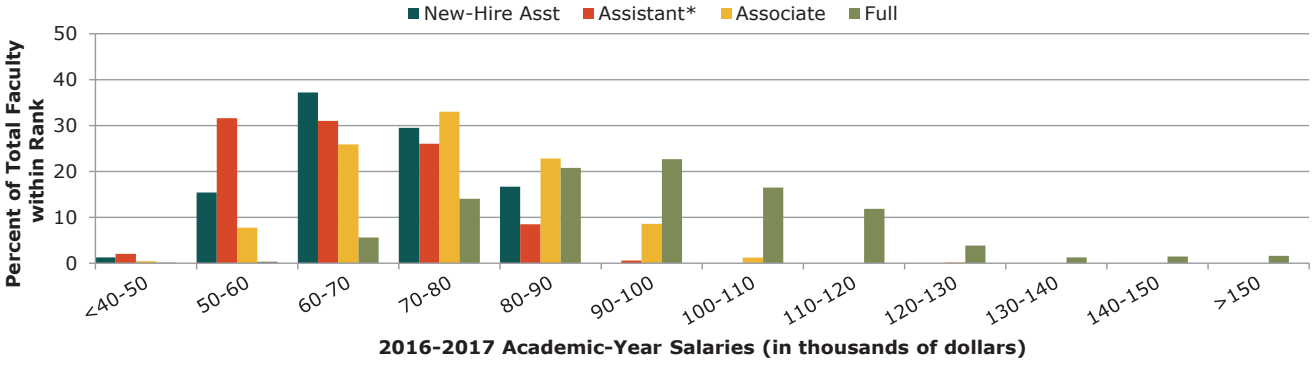


Masters Group Faculty Salaries

81 responses out of 176 departments (46%)

Rank	Gender	2016-17 No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	**All**	**78**	**62,300**	**68,900**	**76,500**	**68,698**	**64,750**
	Male	53	62,800	70,400	76,600	69,026	
	Female	25	61,600	66,700	77,500	68,002	
Assistant Professor*	**All**	**342**	**57,900**	**65,600**	**73,700**	**65,693**	**64,453**
	Male	222	58,100	66,100	74,100	65,935	
	Female	120	57,600	64,400	73,000	65,245	
Associate Professor	**All**	**491**	**66,300**	**74,600**	**83,300**	**74,909**	**73,899**
	Male	345	65,700	74,400	83,500	74,868	
	Female	146	67,700	75,100	82,800	75,007	
Full Professor	**All**	**626**	**82,500**	**94,400**	**106,800**	**96,123**	**95,664**
	Male	494	83,500	95,300	108,200	97,010	
	Female	132	79,200	89,600	102,300	92,804	

* Includes New Asst Professors

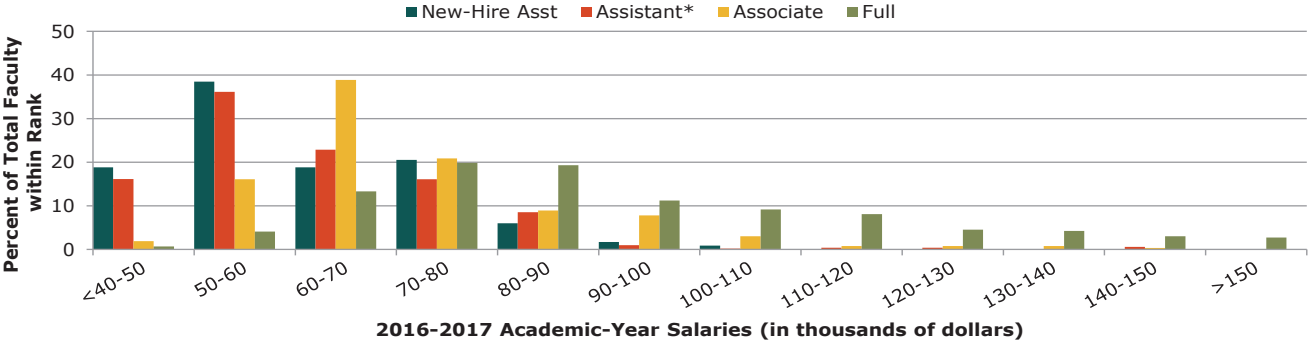


Bachelors Group Faculty Salaries

258 responses out of 1014 departments (25%)

Rank	Gender	2016-17 No. Reported	2016-17 Q1	2016-17 Median	2016-17 Q3	2016-17 Mean	2015-16 Mean
New Asst Professors	**All**	**117**	**52,700**	**59,300**	**71,800**	**61,809**	**63,978**
	Male	70	53,300	59,200	72,300	69,026	
	Female	47	51,300	59,400	69,200	68,002	
Assistant Professor*	**All**	**529**	**53,000**	**59,900**	**71,300**	**62,679**	**93,139**
	Male	315	53,300	59,800	72,300	65,935	
	Female	214	52,600	60,300	69,800	65,245	
Associate Professor	**All**	**628**	**61,700**	**68,100**	**80,100**	**71,994**	**71,436**
	Male	422	62,100	68,200	78,500	74,868	
	Female	146	67,700	75,100	82,800	75,007	
Full Professor	**All**	**730**	**73,200**	**85,600**	**107,000**	**92,096**	**91,480**
	Male	543	73,500	85,900	107,100	97,010	
	Female	187	72,300	84,600	107,100	92,804	

* Includes New Asst Professors



Departmental Groupings

In this report, *Mathematical Sciences* departments are those in four-year institutions in the US that refer to themselves with a name that incorporates (with a few exceptions) "Mathematics" or "Statistics" in some form. For instance, the term includes, but is not limited to, departments of "Mathematics," "Mathematical Sciences," "Mathematics and Statistics," "Mathematics and Computer Science," "Applied Mathematics," "Statistics," and "Biostatistics." Also, *Mathematics* (*Math*) refers to departments that (with exceptions) have "mathematics" in the name; *Stat/Biostat* refers to departments that incorporate (again, with exceptions) "statistics" or "biostatistics" in the name but do not use "mathematics." The streamlining of language here militates against the possible objection to foreshortening the full subject names.

Starting with reports on the 2012 AMS-ASA-IMS-MAA-SIAM Annual Survey of the Mathematical Sciences, the Joint Data Committee implemented a new method for grouping doctorate-granting Mathematics departments. These departments are first grouped into those at public institutions and those at private institutions. These groups are further subdivided based on the size of their doctoral program as reflected in the average annual number of PhDs awarded between 2000 and 2010, based on their reports to the Annual Survey during that period. These groupings are listed below.

For further details on the change in the doctoral department groupings, see the article in the October 2012 issue of *Notices of the AMS* at `www.ams.org/journals/notices/201209/rtx120901262p.pdf`.

Math Public Large consists of departments with the highest annual rate of production of PhDs, ranging between 7.0 and 24.2 per year.

Math Public Medium consists of departments with an annual rate of production of PhDs, ranging between 3.9 and 6.9 per year.

Math Public Small consists of departments with an annual rate of production of PhDs of 3.8 or less per year.

Math Private Large consists of departments with an annual rate of production of PhDs, ranging between 3.9 and 19.8 per year.

Math Private Small consists of departments with an annual rate of production of PhDs of 3.8 or less per year.

Applied Mathematics consists of doctoral-degree-granting applied mathematics departments.

Statistics consists of doctoral-degree-granting statistics departments.

Biostatistics consists of doctoral-degree-granting biostatistics departments.

Masters consists of US departments granting a master's degree as the highest graduate degree.

Bachelors consists of US departments granting a baccalaureate degree only.

Doctoral Mathconsists of all US math public, math private, and applied math mathematics departments granting a PhD as the highest graduate degree.

Mathematics (Math) consists of all US Math Public, Math Private, and Applied Math, Masters, and Bachelors Groups above.

Stat/Biostat consists of all doctoral-degree-granting statistics and biostatistics departments.

Listings of the actual departments that compose these groups are available on the AMS website at `www.ams.org/annual-survey/groups`.

Obtain a Special Faculty Salaries Analysis

Each year AMS provides a limited number of special faculty salary analyses to departments requesting them. These reports are based on data gathered through the Survey and provide more nuanced comparisons with similar institutions than is possible with the Faculty Salaries Report. In order to receive a special analysis, your department must have responded to the most recent Faculty Survey.

Send a list of your peer institutions (a minimum of 12 institutions is required) to `ams-survey@ams.org` along with the date by which the analysis is needed. (If not enough of your peer group have responded to the salary survey, you will be asked to provide additional institutions.) A minimum of two weeks is needed to complete a special analysis.

The analysis produced includes a listing of your peer group institutions along with their salary survey response status; a summary table including the rank (assistant, associate, and full professor); the number reported in each rank; the 1st quartile, median, 3rd quartile, and mean salaries for each along with bar graphs.

Acknowledgements

The Annual Survey attempts to provide an accurate appraisal and analysis of various aspects of the academic mathematical sciences scene for the use and benefit of the community and for filling the information needs of the professional organizations. Every year, college and university departments in the United States are invited to respond. The Annual Survey relies heavily on the conscientious efforts of the dedicated staff members of these departments for the quality of its information. On behalf of the Data Committee and the Annual Survey Staff, we thank the many secretarial and administrative staff members in the mathematical sciences departments for their cooperation and assistance in responding to the survey questionnaires.