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Annual Surveys

Association of Chairs of Departments of Physiology 2015 Survey Results

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The Association of Chairs of Departments of Physiology annual survey was sent electronically to 208 physiology or physiology-related departments throughout the U.S., Canada, Mexico, and Puerto Rico. A total of 55 partial or complete surveys were returned, for a response rate of 26%. This rate is higher than in previous years. Of the 55 surveys received, there were 14 private and 41 public medical schools.

Continued on page 180

THIS ISSUE:

- 167 Business Meeting Minutes
- 185 AAMC Medical School Faculty Compensation Survey
- 189 The APS International Opportunity Program Symposium
- 191 APS and FASEB Showcase NSF-Funded Research
- 195 Antibody Producer Settles USDA Case, Relinquishes AWA Credentials

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Continued from page 165:

Association of Chairs of Departments of Physiology 2015 Survey Results

We continue to encourage more of our colleagues to respond so that we can have more robust data that will benefit all.

The data provide the reader with general trends of faculty demographics and distribution, overall departmental budgets, and space available for research. As a reminder, beginning in 2004, ACDP decided not to include faculty salary information in this report. AAMC salary data is more generally used, so the ACDP Council decided to no longer collect or report this data.

Data were collected on tenure status, gender, and ethnicity of faculty members (Table 1). Table 1 also includes information on the average number of student contact hours for faculty in the lab, classroom and small discussion groups and the type of teaching interactions for the department (MD/DO, DVM, allied health, etc.). Also included is information on the type of medical physiology course being taught (note that departments teach multiple class types, accounting for the fact that the numbers do not add up to the total respondents).

Table 1a. Faculty Summary

Faculty Summary (n = 911)			
	Male	Female	Total
Asian/Pacific Islander	98	34	132
Black (not Hispanic)	5	0	5
Native American	5	2	7
Hispanic	38	12	50
White (not Hispanic)	488	161	649
Foreign National	33	12	45
Not identified	2	2	4
Total	669	223	892
Gender or race/ethnicity not identified			19

Medical Physiology Course Type			
	Yes	No	Total Responded
Integrated Disciplines	39	11	50
Traditional	23	27	50
Within Traditional	36	14	50

Tenure Status in Each Department by Degree					
	Tenured	Not Tenured	Not Eligible	Not Identified	Total
MD	13	11	15		39
PhD	545	139	119	2	805
2 Doctorates	41	8	14		63
Other	0	0	4		4
Total	599	158	152	2	911

For your faculty, what is the average number of hours of student contact (per year) for:

	Student Type	Average (hours)	Number (inst.)
Lab Hours	Graduate	358	39
	Medical	46	41
	Other	115	29
Lectures	Graduate	99	46
	Medical	42	46
	Other	102	34
Small Group	Graduate	34	42
	Medical	21	46
	Other	24	29

Teaching Interactions (n = 55 departments)

MD/DO	46
DDS	15
DVM	5
Allied Health	22
Pharmacy	8
Other Biomedical	35
Life Science	26
Bioengineering	23
Other	17

Table 2 focuses on student/trainee information. Included is information on the gender and number of U.S. citizen/resident alien vs. foreign pre- and postdoctoral students, gender and ethnicity of the U.S. citizen/resident alien

predoctoral and postdoctoral fellows, and gender and country of origin of the foreign predoctoral and postdoctoral fellows. Also shown are the number of predoctoral trainee completions by gender, the number

Table 2. Student/Trainee Summary

Student/Trainee Summary	Predoctoral		Postdoctoral	
	Male	Female	Male	Female
US Citizen/ Resident Alien	351	307	144	138
Foreign	90	123	147	123
Total	441	430	291	261

Race/Ethnicity of US Citizen/Resident Alien Pre- and Postdoctoral Students/Trainees	Predoctoral		Postdoctoral	
	Male	Female	Male	Female
Native American	3	1	2	2
Asian/Pacific Islander	41	35	26	34
Black (not Hispanic)	20	32	9	8
Hispanic	21	27	14	15
White (not Hispanic)	266	212	93	79
Total	351	307	144	138

US Citizen/Resident Alien Predoctoral Trainee Completions	Male	Female
	Native American	1
Asian/Pacific Islander	10	12
Black (not Hispanic)	6	8
Hispanic	8	13
White (not Hispanic)	58	51
Total	83	85

Total Predoctoral Trainee Completions During the Year Ending June 30, 2015	Total
	Female
Male	101
Total	219

Foreign National Predoctoral Trainee Completions	Male	Female
	African	1
Asian/Pacific Islander	8	17
Central/South American	1	7
European/Canadian, etc.	4	6
Middle Eastern	3	2
Other	1	0
Total	18	33

Number of Foreign Pre- and Postdoctoral Students/Trainees	Predoctoral		Postdoctoral	
	Male	Female	Male	Female
African	2	4	2	0
Asian/Pacific Islander	50	68	92	56
Central/South American	8	9	13	15
European/Canadian, etc.	14	22	27	39
Middle Eastern	15	20	8	6
Other	1	0	5	7
Total	90	123	147	123

Number of Foreign Pre- and Postdoctoral Trainees Whose Primary Source of Support is:	Predoectoral	Postdoctoral
	Institutional	73
Research Grants	73	189
Private Foundations	5	21
Home (foreign) Government	12	12
Other	17	12
Total	180	268

Average Annual Stipend (\$U.S.)	Average	Number (inst.)
	Postdoctoral	\$42,670
Predoectoral	\$25,497	47

of U.S. citizen/resident alien predoctoral completions by gender and ethnicity, and the number of foreign predoctoral completions by gender and country of origin. The type of support that is used for foreign pre- and postdoctoral students is included, as are the average stipends paid to all pre- and postdoctoral students by the departments.

Institutional information is provided in Table 3 in terms of the type of institution (public or private) and the average square footage of space occupied by the departments for research, teaching, administration, and other purposes.

Departmental budget information (Table 4) shows average dollar amounts for type of support (institutional hard money, research grants, training grants, endowments, indirect cost recovery). Numbers for all institutions are reported, as are the data broken out by public medical, private medical, and non-medical. Financial information is also given, including

fringe benefit rate, federally negotiated indirect cost rates for both on and off campus, allocated salary dollars from grants directly returned to the departments, percentage of indirect costs returned to the departments, percentage of total faculty salaries derived from research grants, and percentage of faculty having extramural research funding greater than \$100,000/yr.

Table 5 ranks responding Institutions according to their total dollars (institutional hard money, research grants, etc.), research grant dollars (direct or direct plus indirect, as appropriate), research dollars per faculty member, departmental research space, and research dollars per research space. Total number of faculty in each department is also shown.

For an update of AAMC salary data, please see the accompanying article (p. 185). ●

Table 3. Institution Summary

Type of Institution		Space Controlled by Department		
			Average, sq. ft.	No. of Depts
Private	14	Research Space	20,121	50
Public	41	Administrative Space	3,472	48
Total	55	Teaching Space	1,524	43
		Other Space:	1,983	37
		Total Space	26,232	50

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Table 4. Institutional Financial Information

Budget by Institution						
	All Institutions	No. of Depts	Mean No. of Faculty	Private Medical	No. of Institutions	Mean No. of Faculty
Institutional (hard money, e.g, operating costs, state allocations)	\$2,261,766	50	18	\$2,188,640	12	14
Outside Research Grants and Contracts (direct costs only)	\$4,090,291	48	19	\$5,961,549	10	15
Training Grants (direct costs only)	\$347,597	21	20	\$315,515	6	16
Endowments	\$411,180	35	18	\$479,043	9	14
Indirect Cost Recovery (amount returned to your department)	\$385,725	35	20	\$2,521,829	3	20
Other Budget Support	\$526,995	28	18	\$850,251	6	14
Average Departmental Budget	\$7,151,729	50		\$8,729,220	12	
Total faculty			911			167
	Public Medical	No. of Institutions	Mean No. of Faculty	Non-medical	No. of Institutions	Mean No. of Faculty
Institutional (hard money, e.g, operating costs, state allocations)	\$2,306,240	36	20	\$1,900,000	2	16
Outside Research Grants and Contracts (direct costs only)	\$3,737,936	36	20	\$1,076,383	2	16
Training Grants (direct costs only)	\$360,430	15	22	\$0		
Endowments	\$401,170	25	20	\$50,659	1	21
Indirect Cost Recovery (amount returned to your department)	\$185,465	32	20	\$0		
Other Budget Support	\$438,835	22	19	\$0		
Average Departmental Budget	\$6,905,272	36		\$3,001,713	2	
Total Faculty			708			31

Financial Information

	Average, %	No. of Institutions
Current fringe benefit rate most frequently used for primary faculty	31	48
Federally negotiated indirect cost rate for FY 13-14 off campus	28	44
Federally negotiated indirect cost rate for FY 13-14 on campus	51	47
Percentage of allocated salary dollars from grants directly returned to your department	69	32
Percentage of indirect costs returned to your department	20	32
Percentage of total faculty salaries derived from research grants (does not include fringe benefits costs)	34	44
Percentage of faculty having extramural research funding greater than \$100,000/year	53	47

Table 5. Complete Ranking According to Total Dollars

Rank Total Dollars	Total Dollars	Rank Research Grant Dollars	Research Grant Dollars	Rank Research Dollars/Faculty	Research Dollars/Faculty	Rank Total Research Space	Total Research Space	Rank Research Dollars/sqft	Research Dollars/sqft	No. of Faculty
1	29,959,152	1	17,615,981	1	880,799	2	46,152	3	382	20
2	18,291,498	2	10,823,498	2	569,658	6	36,042	9	300	19
3	17,966,893	4	9,496,468	16	249,907	8	34,591	12	275	38
4	13,996,661	5	9,458,702	7	378,348	3	43,151	17	219	25
5	13,134,029	6	8,516,709	6	425,835	13	26,926	7	316	20
6	12,588,462	3	10,127,061	5	440,307	5	36,048	11	281	23
7	11,612,920	8	7,500,000	25	197,368	45	10,414	2	720	38
8	11,076,188	11	5,621,930	13	295,891	4	38,634	29	146	19
9	11,074,100	13	4,818,000	39	112,047	10	33,170	30	145	43
10	10,187,869	7	7,885,987	11	342,869	12	27,510	10	287	23
11	10,150,434	9	6,525,071	4	466,077	22	18,811	5	347	14
12	9,365,497	10	5,957,015	3	496,418	9	33,369	24	179	12
13	8,040,414	15	4,373,054	27	174,922	19	20,220	18	216	25
14	7,934,542	21	3,366,952	23	198,056	25	16,975	20	198	17
15	7,589,346	16	4,287,793	8	357,316	32	13,500	6	318	12
16	7,324,568	12	5,303,335	12	311,961	48	5,640	1	940	17
17	7,052,872	31	2,572,663	24	197,897	16	22,095	35	116	13
18	7,024,467	17	3,959,602	35	127,729	18	20,870	21	190	31
19	6,946,454	19	3,482,020	18	232,135	11	31,313	36	111	15
20	6,346,174	20	3,478,643	9	347,864	27	16,729	19	208	10
21	6,246,572	29	2,627,396	17	238,854	1	49,427	47	53	11
22	6,244,328	23	3,163,262	30	150,632	15	22,163	31	143	21
23	6,163,209	14	4,545,096	29	156,727	28	15,065	8	302	29
24	6,093,981	38	1,832,470	44	65,445	14	24,166	45	76	28
25	6,053,089	30	2,575,626	31	143,090	7	35,377	46	73	18
26	6,006,594	22	3,197,136	34	127,885	30	14,492	16	221	25
27	5,489,050	35	2,094,064	28	161,082	42	11,600	23	181	13
28	5,351,793	42	1,634,620	38	116,759	24	18,355	41	89	14
29	5,294,458	34	2,122,028	32	132,627	37	12,484	25	170	16
30	5,274,406	25	2,943,180	21	210,227	41	11,623	13	253	14
31	5,206,000	28	2,694,000	20	224,500	26	16,900	27	159	12
32	5,090,196	40	1,738,147	43	69,526	20	19,971	42	87	25
33	4,672,039	33	2,228,972	33	131,116	17	21,368	38	104	17
34	4,592,662	27	2,717,196	19	226,433	21	19,848	32	137	12
35	4,349,193	18	3,820,279	10	347,298	46	10,100	4	378	11
36	4,325,324	24	3,114,520	14	259,543	31	14,000	15	222	12
37	4,262,468	41	1,734,245	36	123,875	29	14,774	34	117	14
38	4,251,048	45	1,107,996	45	65,176	34	13,227	43	84	17
39	3,962,069	37	1,903,442	46	63,448	38	12,475	28	153	30
40	3,865,988	36	2,023,450	37	119,026	39	12,048	26	168	17
41	3,850,766	32	2,279,513	22	207,228	36	12,507	22	182	11
42	3,813,002	26	2,772,748	15	252,068	43	11,236	14	247	11
43	3,800,000	39	1,800,000	26	180,000	33	13,394	33	134	10
44	3,797,659	44	1,146,133	47	45,845	44	10,555	37	109	25
45	3,042,987	43	1,173,769	41	106,706	40	11,671	39	101	11
46	2,600,500	46	1,000,000	40	111,111	35	12,800	44	78	9
47	2,203,425	48	352,766	48	16,798	23	18,500	48	19	21
48	1,993,394	47	821,419	42	91,269	47	8,289	40	99	9
49	1,220,000	49	0	49	0	49	2,975	49	0	7
50	807,721	50	0	50	0	50	2,488	50	0	6

AAMC Medical School Faculty Compensation Survey

Each year, the American Association of Medical Colleges (AAMC) surveys all U.S. medical schools as to faculty compensation. Because of this, the ACDP (see associated article on p. 165) decided to no longer collect the same data from its members.

As a supplement to the ACDP survey, the AAMC has agreed to allow the APS to publish selected results from their survey.

Table 1 shows the regional distribution of medical schools responding to the AAMC survey in terms of public medical and private medical. Also shown is the number of physiology departments in those regions that responded. The number of departments

responding to the AAMC survey is not the same as the ACDP survey, since AAMC usually receives a much greater response from institutions.

Summary statistics on faculty compensation in physiology departments for PhD and MD faculty are given in Table 2. Table 3 shows the changes in salary that have occurred over the past 3 years for both PhD and MD faculty. The summary statistics for separate regions of the country for both PhD and MD faculty are given in Table 4.

Table 5 shows the salary comparison between faculty in all basic science departments vs. those in physiology departments. ●

Table 1. Distribution of Medical Schools Responding to AAMC Medical School Faculty Compensation Survey

		Northeast	Midwest	South	West	TOTAL
All	Private Medical	27	12	14	4	57
	Public Medical	13	22	37	15	87
Physiology	All Medical Schools	16	12	22	11	61

Table 2. Summary Statistics on Physiology Department PhD and MD Faculty Compensation

PhD Faculty		25th	Median	75th	Mean	No. of Faculty
Chair	All Schools	234,000	276,000	326,000	284,900	61
	Medical Public	230,000	267,000	306,000	265,500	42
	Medical Private	235,000	304,000	360,000	327,700	19
Professor	All Schools	138,000	165,000	194,000	171,200	529
	Medical Public	138,000	165,000	190,000	171,600	369
	Medical Private	138,000	166,000	201,000	170,200	160
Assoc. Prof.	All Schools	102,000	115,000	131,000	117,400	321
	Medical Public	101,000	115,000	128,000	115,600	231
	Medical Private	104,000	115,000	143,000	122,100	90
Asst. Prof.	All Schools	67,000	88,000	100,000	85,600	356
	Medical Public	65,000	88,000	97,000	84,400	247
	Medical Private	68,000	89,000	105,000	88,300	109
Instructor	All Schools	48,000	52,000	58,000	53,300	71
	Medical Public	48,000	51,000	57,000	51,800	51
	Medical Private	50,000	55,000	67,000	57,000	20

Table 2. Summary Statistics on Physiology Department PhD and MD Faculty Compensation (continued)

MD Faculty		25th	Median	75th	Mean	No. of Faculty
Chair	All Schools	295,000	340,000	401,000	345,400	12
	Medical Public	292,000	309,000	388,000	338,600	7
	Medical Private	178,000	367,000	526,000	355,000	5
Professor	All Schools	156,000	183,000	230,000	193,300	63
	Medical Public	160,000	186,000	231,000	194,200	32
	Medical Private	153,000	180,000	217,000	192,500	31
Assoc. Prof.	All Schools	89,000	106,000	125,000	110,100	30
	Medical Public	89,000	105,000	122,000	106,800	14
	Medical Private	90,000	111,000	134,000	112,900	16
Asst. Prof.	All Schools	70,000	92,000	103,000	88,800	26
	Medical Public	70,000	83,000	98,000	82,800	16
	Medical Private	90,000	97,000	107,000	98,400	10
Instructor	All Schools	48,000	53,000	61,000	54,200	5
	Medical Public					4
	Medical Private					1

For less than 5 faculty, data are not reported

Table 3. Change in Total Compensation for Physiology Department PhD/MD Faculty

PhD Faculty							
2014 - 2015		2013 - 2014		2012 - 2013		% Change 2013 - 2014 to 2014 - 2015	
Mean	Median	Mean	Median	Mean	Median	Mean	Median
131,600	122,000	129,100	119,000	126,700	118,000	1.9	2.5

Mean and median values were combined for Assistant, Associate, and Professor

MD Faculty							
2014 - 2015		2013 - 2014		2012 - 2013		% Change 2013 - 2014 to 2014 - 2015	
Mean	Median	Mean	Median	Mean	Median	Mean	Median
149,500	143,000	149,900	134,000	147,200	134,000	-0.3	6.7

Mean and median values were combined for Assistant, Associate, and Professor

Table 4. Summary Statistics on Physiology Department PhD and MD Faculty Compensation by Region

PhD Faculty		Northeast	Midwest	South	West
Chair	25th	235,000	238,000	224,000	214,000
	Median	277,000	276,000	258,000	281,000
	75th	323,000	349,000	319,000	328,000
	Mean	298,200	310,200	267,300	272,900
	Total faculty	15	13	24	9
Professor	25th	146,000	137,000	130,000	151,000
	Median	171,000	166,000	157,000	176,000
	75th	195,000	199,000	184,000	205,000
	Mean	170,700	173,500	161,600	188,700
	Total faculty	101	156	188	84
Assoc. Prof.	25th	111,000	98,000	97,000	111,000
	Median	122,000	115,000	110,000	120,000
	75th	144,000	130,000	124,000	137,000
	Mean	128,000	115,700	112,200	119,100
	Total faculty	69	106	116	30
Asst. Prof.	25th	73,000	63,000	68,000	78,000
	Median	97,000	87,000	85,000	94,000
	75th	110,000	97,000	95,000	107,000
	Mean	90,400	83,800	83,300	94,600
	Total faculty	54	109	160	33
Instructor	25th	50,000	42,000	48,000	48,000
	Median	55,000	52,000	51,000	55,000
	75th	66,000	60,000	56,000	58,000
	Mean	58,900	51,200	52,200	53,100
	Total faculty	10	11	30	20
MD Faculty		Northeast	Midwest	South	West
Chair	25th			290,000	
	Median			303,000	
	75th			380,000	
	Mean			288,800	
	Total faculty	2	3	6	1
Professor	25th	161,000	156,000	128,000	160,000
	Median	193,000	181,000	172,000	172,000
	75th	239,000	217,000	224,000	204,000
	Mean	202,300	186,300	182,600	187,800
	Total faculty	30	6	15	12
Assoc. Prof.	25th	86,000	108,000	76,000	
	Median	103,000	142,000	92,000	
	75th	107,000	156,000	116,000	
	Mean	101,800	133,700	96,200	
	Total faculty	6	9	12	3

Table 4. Summary Statistics on Physiology Department PhD and MD Faculty Compensation by Region (continued)

		Northeast	Midwest	South	West
Asst. Prof.	25th		83,000	70,000	
	Median		95,000	73,000	
	75th		101,000	102,000	
	Mean		93,800	82,500	
	Total faculty	2	12	12	0
Instructor	25th				
	Median				
	75th				
	Mean				
	Total faculty	1	1	1	2

For less than 5 faculty, data are not reported

Table 5. Salary Comparison Between All Basic Science Departments and Physiology Departments

		All Basic Science Depts.	Physiology
Chair	25th	235,000	234,000
	Median	282,000	276,000
	75th	338,000	326,000
	Mean	290,800	284,900
	Total faculty	540	61
Professor	25th	143,000	138,000
	Median	172,000	165,000
	75th	210,000	194,000
	Mean	182,600	171,200
	Total faculty	4,350	529
Assoc. Prof.	25th	102,000	102,000
	Median	118,000	115,000
	75th	136,000	131,000
	Mean	121,900	117,400
	Total faculty	3,418	321
Asst. Prof.	25th	77,000	67,000
	Median	94,000	88,000
	75th	108,000	100,000
	Mean	94,200	85,600
	Total faculty	4,026	356
Instructor	25th	53,000	48,000
	Median	59,000	52,000
	75th	68,000	58,000
	Mean	64,200	53,300
	Total faculty	654	71