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Association of Chairs of Departments of Physiology 2001 Survey Results

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The Association of Chairs of Departments of Physiology annual survey was mailed to 176 physiology departments throughout the US, Canada and Puerto Rico. A total of 97 surveys were returned, for a response rate of 55%. This rate is slightly higher than that of the 2000 survey (52%). Of the 97 surveys returned, there were 60 public and 37 private medical schools including 11 non-medical (which are public veterinarian or osteopathic schools).

The data provide the reader with general trends of faculty, salary, overall departmental budgets, and space available for research. Faculty salary information (Tables 1-3) is derived from the total compensation column, which includes any supplementary income, but not fringe benefits. In addition to salary information, further data are provided on tenure, gender, ethnicity, and salary by number of years in rank.

The statistics are based on 97 responses (three from Canada) but the results of salary, tenure, gender, ethnicity, and number of years in rank are calculated on the number of respondents providing this information. However, two institutions did not provide any faculty salary information. In addition, results presented reflect responses from those institutions reporting, which may vary on a year-to-year basis.

Table 1. Faculty Salaries for Fiscal Year 2001

	Median	% Change From Previous Survey	Minimum	Maximum	No. of Faculty
Chairperson					
All Schools	$166,532	1.9	$ 66,660	$300,000	87
Medical Public	175,344	4.9	66,660	280,000	44
Medical Private	173,656	2.7	113,236	300,000	31
Nonmedical	130,968	-4.0	70,561	178,389	12
Female	129,753	-8.1	120,840	170,000	6
Professor					
All Schools	112,500	0.4	34,883	306,400	667
Medical Public	112,528	2.7	34,883	267,800	327
Medical Private	114,566	-3.5	41,616	306,400	234
Nonmedical	106,074	0.5	57,069	181,167	106
Female	110,138	3.7	47,891	203,831	95
Associate Professor					
All Schools	81,081	1.2	36,904	150,000	402
Medical Public	81,300	3.2	36,904	129,889	195
Medical Private	80,000	-4.6	47,424	150,000	130
Nonmedical	85,252	9.0	48,630	134,540	77
Female	81,804	4.1	36,904	150,000	89
Assistant Professor					
All Schools	67,479	4.1	30,000	124,384	326
Medical Public	67,127	3.4	32,000	102,135	144
Medical Private	68,000	4.8	36,822	124,384	131
Nonmedical	66,793	4.1	30,000	106,333	51
Female	65,153	4.3	30,000	106,333	92
Instructor					
All Schools	47,000	4.9	30,900	87,100	63
Medical Public	44,892	7.4	32,640	87,100	31
Medical Private	48,000	1.8	30,900	70,000	27
Nonmedical	50,000	-2.5	42,642	74,400	5
Female	44,531	3.6	30,900	86,848	26

Student/trainee information is provided by ethnicity for predoctoral and postdoctoral categories, as well as predoctoral trainee completions, stipends provided, and type of support.

Departmental budget information (Table 4) shows type of support, faculty salaries derived from grants along with negotiated indirect costs to the departments. Table 5 ranks responding institutions according to their total dollars, research grant dollars, and departmental space. Space averages are presented as research, administration, teaching and other. ❖

Table 2. Average Salary by Number of Years in Rank

	Years					
	0-5	**6-10**	**11-15**	**16-20**	**21-25**	**26+**
Chairpersons						
Salary	$150,052	170,286	192,023	179,965	172,229	192,901
# of Faculty	28	20	22	8	7	2
Professors						
Salary	110,338	113,711	117,649	117,555	126,860	127,587
# of Faculty	189	152	142	91	52	41
Assoc. Professors						
Salary	83,747	79,872	87,022	78,367	77,805	80,249
# of Faculty	205	87	58	22	17	13
Asst. Professors						
Salary	67,216	66,656	61,176	61,155	89,625	65,127
# of Faculty	267	46	8	3		
Instructors						
Salary	47,624	54,486	58,521		0	0
#of Faculty	56	4	3		0	0

Space Controlled by Department

Research	17,338
Administration	2,872
Teaching	2,830
Other	2,097
Total space	25,136

Type of Institution (n = 97)

Support		*Teaching Interactions*			
Public	60	MD/DO	88	Pharmacy	22
Private	37	DDS	30	Other biomedical	62
		DVM	8	Life science	41
		Allied health	45	Bioengineering	28
				Other	21

Tenure status in each department by degree

	Tenured	*Not Tenured*	*Not Eligible*	*Total*
MD	41	13	2	56
PhD	903	267	192	1,362
Both	68	27	11	106
Other	9	2	10	21

Faculty Summary (n = 1,522)

	Male	*Female*	*Total*
American Indian/ Alaskan Native	0	1	1
Asian/Pacific Islander	128	35	163
Black, not Hispanic origin	18	9	27
Hispanic	45	14	59
White, not of Hispanic origin	1,022	250	1,272
Foreign national	57	12	69
Total	1,202	296	1,498

Student/Trainee Summary

Total number of US citizen/resident alien pre- and postdoctoral students/trainees

Predoctoral male	505	Postdoctoral male	243
Predoctoral female	424	Postdoctoral female	162

Total number of foreign pre- and postdoctoral students/trainees

Predoctoral male	287	Postdoctoral male	481
Predoctoral female	253	Postdoctoral female	251

Ethnicity of each pre- and postdoctoral student/trainee

	Predoctoral		*Postdoctoral*	
	Male	Female	Male	Female
American Indian/ Alaskan Native	5	3	0	2
Asian/Pacific Islander	51	32	66	39
Black, not Hispanic origin	33	55	10	10
Hispanic	31	21	3	9
White, not of Hispanic origin	385	313	164	102

Number of foreign pre- and postdoctoral students/trainees

	Predoctoral		*Postdoctoral*	
	Male	Female	Male	Female
African	11	5	12	3
Asian/Pacific Islander	139	146	282	117
Central and South American	14	8	24	13
European, Canadian, Australian	73	62	108	89
Middle Eastern	35	19	29	12
Other	8	9	20	12

Number of foreign pre- or postdoctoral trainees whose primary source of support is:

	Predoctoral	*Postdoctoral*
Institutional	194	78
Research grants	267	567
Private foundations	10	38
Home (foreign) governments	20	18
Other	11	11

US citizen/resident alien predoctoral trainee completions:

	Male	*Female*
American Indian/Alaskan Native	1	2
Asian or Pacific Islander	12	6
Black, not of Hispanic origin	5	2
Hispanic	5	3
White, not of Hispanic origin	76	52

Foreign National predoctoral trainee completions:

	Male	*Female*
African	0	0
Asian or Pacific Islander	21	26
Central or South American	1	0
European, Canadian, Australian	15	11
Middle Eastern	4	5
Other	2	1

Predoctoral Trainee Completions

Number of trainees who have completed doctoral work during the year ended June 30, 2001

Predoctoral male 142 *Predoctoral female* 108

Average annual starting stipend (in US dollars) for trainees:

Predoctoral	*Postdoctoral*
$17,978	$30,369

Table 3. Salaries by Region

Region	Average	Median	Minimum	Maximum	Total
Chairperson					
Northeast	$186,114	$178,389	$102,675	$300,000	21
Midwest	182,917	177,190	99,019	280,000	21
South	164,945	151,271	114,999	255,400	32
West	173,435	174,183	103,223	223,602	9
Canada/Puerto Rico	68,505	68,400	66,660	70,561	4
Professor					
Northeast	114,893	112,790	41,616	212,892	154
Midwest	122,859	118,401	48,591	247,105	173
South	114,213	109,700	53,276	267,800	241
West	126,420	121,500	49,250	306,400	75
Canada/Puerto Rico	58,930	60,158.50	34,883	72,848	24
Associate Professor					
Northeast	83,500	79,632	48,247	122,573	99
Midwest	87,364	86,894	53,088	150,000	112
South	82,214	80,845	38,766	140,420	146
West	84,197	81,417	59,088	116,835	28
Canada/Puerto Rico	49,538	49,496	36,904	57,552	17
Assistant Professor					
Northeast	65,559	67,000	32,398	101,070	99
Midwest	70,369	70,000	30,000	124,384	78
South	68,021	67,605	41,633	89,750	112
West	66,961	64,577	43,697	94,008	29
Canada/Puerto Rico	37,680	35,793	32,000	49,548	8
Instructor					
Northeast	50,386	46,350	38,500	86,848	11
Midwest	49,636	48,000	30,900	74,400	15
South	46,164	46,359	32,640	61,880	31
West	55,104	52,500	37,872	87,100	6
Canada/Puerto Rico	0	0	0	0	2

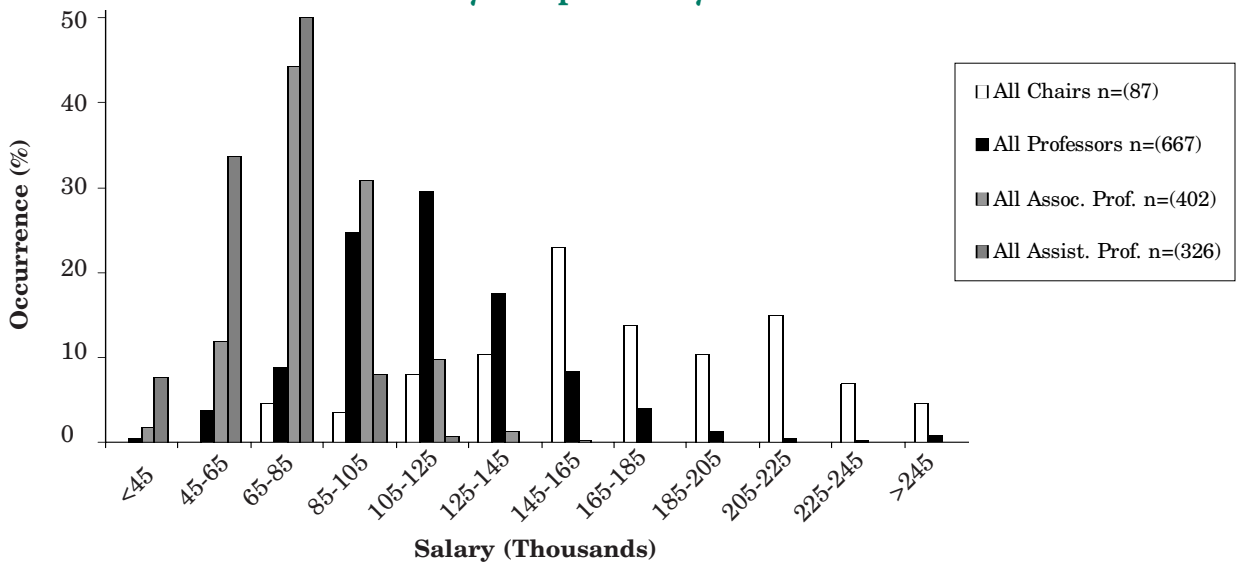
Northeast: ME, NH, VT, NY, MA, RI, CT, NJ, PA, MD, DE, DC

Midwest: MI, OH, IN, IL, WI, IA, MO, KS, NE, ND, SD, MN

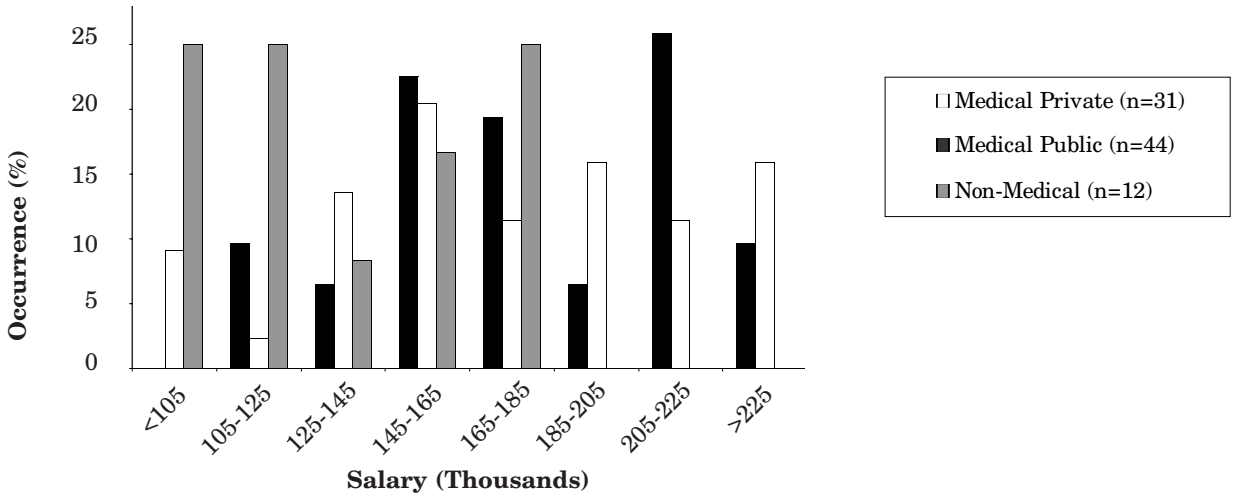
South: VA, WV, KY, TN, NC, SC, GA, FL, AL, MS, AR, LA, OK, TX

West: AK, HI, MT, WY, CO, NM, AZ, ID, WA, OR, CA, UT

Salary Comparison by Title

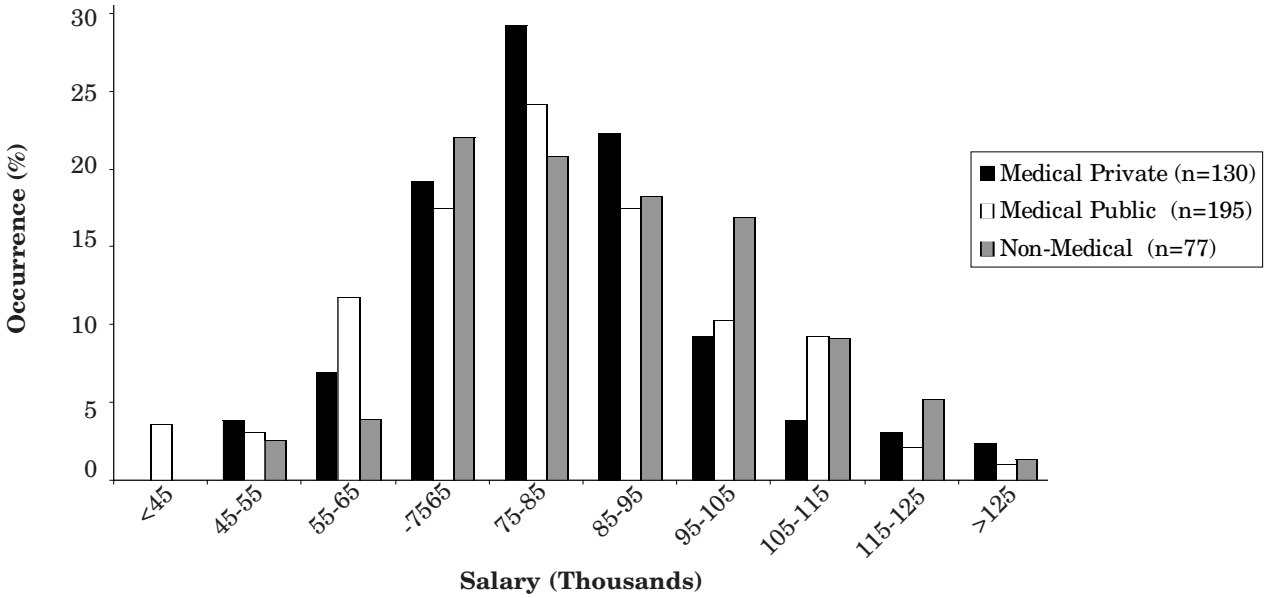


Chairs by Institution



Assistant Professors by Institution

Associate Professors by Institution



Professors by Institution

Table 4. Budgets by Institutions

	All Institutions	No.	Private Med.	No.	Public Med.	No.	Nonmed.	No.
Institutional	$1,634,434	93	$1,552,121	35	$1,566,997	45	$1,784,185	13
Outside Research Grants (direct costs)	3,375,346	90	4,336,913	35	3,182,566	43	2,606,560	12
Training Grants (direct costs only)	250,047	52	384,670	22	233,283	26	132,187	4
Endowments	186,895	45	203,056	15	120,309	24	237,320	6
Indirect Cost Recovery (amount to dept.)	245,459	52	457,825	10	183,021	34	95,532	8
Other Budget Support (identify)	315,895	66	580,314	22	282,282	35	85,088	9
Average Departmental Budget	1,001,346		1,252,483		928,076		823,479	
Standard Deviation	1,303,945		1,583,741		1,232,747		1,095,347	

Financial Information

Current fringe benefit rate most frequently used for Primary faculty	24.67	(n = 92)
Federally negotiated indirect cost rate for FY 01-02 off campus	26.65	(n = 66)
on campus	50.45	(n = 89)
Percentage of allocated faculty salary dollars raised from grants, etc,. directly returned to your department	73.71	(n = 55)
Percentage of indirect costs returned to your department	17.04	(n = 49)
Percentage of total faculty salaries derived from research grants (do not include fringe benefits costs)	34.94	(n = 87)

Table 5. Complete Ranking According to Total Dollars

Rank	Total Dollars	Rank Research Grant Dollars	Research Grant Dollars	Rank Research Dollars/ Faculty	Research Dollars/ Faculty	Rank Total Research Space	Research Space (sq. ft.)	Rank Research Dollars/ sq. ft.	Research Dollars/ sq. ft.	No. of Faculty
1	$18,638,347	1	$16,029,926	2	$667,914	1	41,428	7	$387	24
2	18,630,853	3	13,920,327	1	928,022	8	31,125	3	447	15
3	16,361,233	2	14,033,250	4	501,188	2	38,157	8	368	28
4	13,800,705	7	6,747,882	24	259,534	33	20,147	11	335	26
5	12,372,266	4	9,309,958	10	310,332	16	26,333	9	354	30
6	12,141,506	6	6,945,120	31	231,504	26	23,039	16	301	30
7	11,510,819	13	6,065,743	8	356,808	55	12,681	2	478	17
8	10,824,566	8	6,745,956	9	321,236	6	33,720	39	200	21
9	10,591,413	10	6,626,807	16	288,122	14	27,396	30	242	23
10	10,108,284	16	5,529,348	23	263,302	19	25,389	35	218	21
11	9,909,081	9	6,663,187	17	277,633	5	35,500	44	188	24
12	9,318,106	5	7,056,000	13	294,000	12	28,177	27	250	24
13	9,308,041	71	1,707,255	80	68,290	15	26,500	83	64	25
14	9,272,202	11	6,249,690	6	390,606	35	19,761	13	316	16
15	8,830,568	19	5,154,307	20	271,279	3	36,063	62	143	19
16	8,828,745	20	5,112,369	21	269,072	7	32,665	56	157	19
17	8,785,446	18	5,412,452	41	193,302	11	28,183	42	192	28
18	8,717,074	15	5,744,867	42	191,496	27	22,823	26	252	30
19	8,635,194	14	5,966,989	12	298,349	30	21,334	19	280	20
20	8,533,320	27	4,619,925	32	230,996	45	16,227	18	285	20
21	8,451,036	24	4,839,771	7	372,290	4	35,879	66	135	13
22	8,035,169	21	5,009,691	27	250,485	13	27,567	49	182	20
23	7,584,000	17	5,500,000	5	392,857	10	29,000	43	190	14
24	7,394,109	12	6,243,435	3	624,343	46	15,955	5	391	10
25	7,338,555	30	4,073,726	39	193,987	36	19,707	36	207	21
26	7,025,845	25	4,748,001	28	249,895	42	17,479	20	272	19
27	6,912,601	29	4,100,195	14	292,871	29	22,028	46	186	14
28	6,740,227	23	4,918,753	43	189,183	23	24,105	38	204	26
29	6,633,870	22	4,992,290	34	208,012	18	25,929	41	193	24
30	6,622,849	33	3,800,000	54	158,333	20	24,522	57	155	24
31	6,326,856	39	3,105,321	47	182,666	31	20,521	60	151	17
32	6,310,020	28	4,107,024	45	186,683	24	23,932	50	172	22
33	6,307,012	53	2,433,874	79	81,129	41	17,737	64	137	30
34	6,298,862	26	4,715,665	30	235,783	39	18,027	22	262	20
35	6,265,140	34	3,565,092	58	155,004	17	26,234	65	136	23
36	5,814,495	40	3,093,591	59	154,680	59	12,398	28	250	20
37	5,552,315	66	1,987,000	68	116,882	85	5,100	6	390	17
38	5,461,549	67	1,982,842	81	66,095	21	24,241	81	82	30
39	5,338,035	45	2,619,612	73	109,151	25	23,891	75	110	24
40	5,290,281	48	2,558,636	63	142,146	34	20,104	70	127	18
41	5,253,519	42	3,000,000	19	272,727	84	5,404	1	555	11
42	5,074,916	36	3,314,272	11	301,297	51	14,348	31	231	11
43	5,042,342	32	4,039,839	33	224,436	40	17,828	32	227	18

Table 5. Complete Ranking According to Total Dollars

Rank	Total Dollars	Rank Research Grant Dollars	Research Grant Dollars	Rank Research Dollars/ Faculty	Research Dollars/ Faculty	Rank Total Research Space	Research Space (sq. ft.)	Rank Research Dollars/ sq. ft.	Research Dollars/ sq. ft.	No. of Faculty
44	$5,021,007	44	$2,693,017	61	$149,612	44	16,372	52	$165	18
45	5,002,565	37	3,224,492	22	268,708	61	11,993	21	269	12
46	4,998,517	51	2,452,165	53	163,478	74	8,385	17	292	15
47	4,824,874	43	2,769,308	26	251,755	58	12,423	33	223	11
48	4,694,794	31	4,044,895	35	202,245	28	22,117	48	183	20
49	4,621,439	54	2,373,908	64	139,642	32	20,464	71	116	17
50	4,570,184	56	2,322,902	40	193,575	71	9,118	24	255	12
51	4,532,686	59	2,200,850	65	137,553	37	19,600	73	112	16
52	4,427,103	52	2,446,906	44	188,224	47	15,259	54	160	13
53	4,421,348	38	3,122,788	29	240,214	65	9,949	14	314	13
54	4,149,130	46	2,605,447	15	289,494	79	7,596	10	343	9
55	4,065,745	47	2,583,573	46	184,541	64	10,257	25	252	14
56	3,948,702	64	1,994,417	66	124,651	22	24,160	80	83	16
57	3,888,862	73	1,610,031	36	201,254	60	12,251	68	131	8
58	3,864,687	69	1,836,869	70	114,804	75	8,350	34	220	16
59	3,804,595	49	2,524,647	72	109,767	9	30,461	79	83	23
60	3,795,406	50	2,503,497	57	156,469	54	13,648	47	183	16
61	3,771,702	55	2,368,824	55	157,922	72	9,070	23	261	15
62	3,657,010	41	3,052,685	18	277,517	50	14,857	37	205	11
63	3,648,171	65	1,991,165	48	181,015	56	12,500	55	159	11
64	3,574,715	35	3,344,403	38	196,730	76	8,220	4	407	17
65	3,566,477	57	2,315,698	51	165,407	53	14,097	53	164	14
66	3,520,515	60	2,147,790	74	102,276	43	16,699	69	129	21
67	3,330,766	75	1,497,311	69	115,177	77	8,023	45	187	13
68	3,281,017	58	2,312,695	52	165,193	80	7,253	12	319	14
69	3,260,787	70	1,780,809	67	118,721	62	10,765	51	165	15
70	3,232,517	72	1,622,555	76	95,444	63	10,526	58	154	17
71	3,173,427	61	2,041,729	50	170,144	38	19,030	76	107	12
72	3,161,747	63	2,005,000	37	200,500	49	14,881	67	135	10
73	3,130,430	68	1,931,789	62	148,599	78	7,793	29	248	13
74	3,128,765	62	2,015,716	25	251,965	82	6,566	15	307	8
75	2,791,046	74	1,510,110	60	151,011	66	9,882	59	153	10
76	2,767,411	82	734,951	83	45,934	81	6,950	77	106	16
77	2,646,119	76	1,443,102	49	180,388	67	9,825	61	147	8
78	2,640,856	83	671,950	85	31,998	48	15,000	86	45	21
79	2,600,337	80	1,019,000	78	92,636	70	9,131	74	112	11
80	2,573,369	81	899,021	82	56,189	68	9,809	78	92	16
81	2,485,345	78	1,306,826	75	100,525	69	9,242	63	141	13
82	2,173,200	85	350,000	86	29,167	83	5,500	84	64	12
83	2,131,781	79	1,125,000	71	112,500	52	14,116	82	80	10
84	2,088,033	77	1,418,550	56	157,617	57	12,470	72	114	9
85	1,280,710	84	659,960	77	94,280	89	3,400	40	194	7
86	1,013,350	86	216,067	84	43,213	87	3,741	85	58	5
87	1,000,478	87	114,541	87	19,090	73	8,483	89	14	6
88	815,926	88	81,000	88	13,500	90	2,600	87	31	6
89	481,259	89	60,411	89	12,082	88	3,527	88	17	5
90	89,354	90	0	90	0	86	4,570	90	0	10

ACDP 2001 Survey Results

AAMC Comparison

Each year the Association of American Medical Colleges (AAMC) publishes Faculty Salary Survey Reports based on information it has gathered from medical colleges across the US and Canada.

The data are divided into Basic Sciences Departments, which includes Departments of Physiology, and Clinical Science Departments.

In order to offer a comparison with the data collected by the Association of Chairs of Departments of Physiology in the accompanying article, below is a table showing median salaries as reported by AAMC in their 2001 survey.

The complete 2001 AAMC Faculty Salary Survey Reports can be purchased from the AAMC publications office (202-828-0416 or http://www.aamc.org/publications/start.htm). The cost for constituents is $75, plus shipping. ❖

Table 1. Salary Data for Faculty in Departments of Physiology

	PhD Degrees		MD Degrees	
	Median salary	n	Median salary	n
Chair	$166,000	74	$200,000	20
Professor	108,000	616	131,000	68
Associate Professor	77,000	395	84,000	20
Assistant Professor	63,000	365	54,000	32
Instructor	42,000	65	51,000	9

75th APS President

(*continued from page 87)*

in active physiology laboratories, helping them develop classroom exercises for their students, and making available a variety of curricular resources for their use. Many of those who have participated are "master teachers" who return to their districts and "spread the word" to other teachers with whom they interact. Although we don't know if this program has increased the number of students interested in studying physiology, it is likely to have had a positive effect of their view of physiology.

In concert with the 2000 Strategic Plan, we have also begun to reach out to undergraduates with the APS Undergraduate Summer Research Fellowships. This summer's class of 12 will be the third to participate in this program which is designed to encourage talented undergraduates to pursue graduate training in the physiological sciences by introducing them to an exciting research experience.

But there is more that we can do. We can make the APS website the premier place to find out what's new and exciting about physiology. Our Sections are an obvious resource, and I will be asking them to help provide content for a "What's New in Physiology" site. In addition, the Careers Committee and the Education Office have begun to develop vignettes, member profiles, and case studies to illustrate the richness and excitement of research in physiology. These examples will be designed with input from the Sections and will have increasing complexity as they are directed to different audiences.

Another strategy for conveying the excitement and diversity of modern physiology that I intend to explore is the creation of a "Speakers Bureau" whose members would be willing to discuss their research with students/faculty at local undergraduate institutions. This would complement the web-based instructional resource site that the Education Committee is currently developing. We are already reaching out to teachers of undergraduate physiology courses via our interaction with members of the Human Anatomy and Physiology Society (HAPS) at their annual meeting where APS sponsors an update lecture. This year, I will be meeting with a focus group of these instructors to discuss ways to promote physiology and physiological research to their students.

While it is difficult to know how effective the above programs will be, they all hold a promise for increasing the appreciation of physiology in the eyes of students as well as the public.

The Translational Research Initiative

Our new initiative on Translational Research, which was part of the 2000 Strategic Plan, should also enhance the visibility of physiology to students, colleagues, and the public as it reinvigorates the bi-directional transfer of ideas and information between the basic sciences and clinical medicine. Under the stewardship of President **John Hall**, we have established a Task Force with objectives that include highlighting translational research in our publications and our meetings, encouraging the development of interdisciplinary research teams that bridge molecular, cellular, and organ systems physiology with clinical research, promoting translational research as a viable career option for physiologists, and increasing the impact of physiology on medical and postgraduate medical education. We have already begun work on these objectives. Our journal editors have called for the submission of translational research manuscripts. APS is sponsoring symposia at the American Society of Nephrology and the American Gastroenterology Association. The Publications Committee has negotiated renewal of the "Physiology in Medicine" series in the *Annals of Internal Medicine*; the Program Committee continues to encourage and support cross-sectional, cross-society bench-to-bedside programming, and the Education Committee has initiated the development of a resource