Undergraduate osteopathic medical education

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The American Osteopathic Association serves as the accrediting body for osteopathic medical education in the United States. All accreditation activities are conducted through the AOA Department of Education by the Bureau of Professional Education and its component groups. (For membership on these committees, see Appendix I, beginning on page 971).

The Bureau is recognized by the US Office of Education as the official accrediting agency for osteopathic medical education. It reports to the AOA Board of Trustees and to appropriate government and nongovernment agencies.

The Committee on Colleges (COC), a subunit of the Bureau, is responsible for inspecting all colleges of osteopathic medicine (COMs). The COC serves as the initial review level in the accreditation process. Based on the results of its reviews and on-site inspections, the COC makes recommendations to the Bureau for approval or disapproval of accreditation status. It also serves as a consulting body should a college request advice on accreditation matters or educational management and policy.

The Bureau, in turn, presents accreditation recommendations to the AOA Board of Trustees, to which it reports. In cases where a college may not agree with a recommendation, the Board serves as a final court of appeal.

The accreditation process involves the examination and evaluation of all aspects of a COM, including organization, administration, and finance; faculty and instruction; student admissions, evaluation, and services; curriculum organization; and the nature of the COM's facilities.

Once accredited, a COM must undergo full reevaluation approximately every 7 years to maintain its accredited status.

Copies of the *Basic Standards for Accreditation* are available from the AOA Department of Education.

Currently, 15 fully accredited COMs and 1 provisionally accredited COM train future osteopathic physicians. An additional COM is cur-

rently undergoing a preaccreditation process. (See Appendix II, page **974**.)

The information presented herein has been adapted from the 1994 Annual Statistical Report, published in September 1994 by the American Association of Colleges of Osteopathic Medicine (AACOM). When available, information regarding the newest COM, Lake Erie College of Osteopathic Medicine (LECOM) in Lake Erie, Pa, is cited separately from data provided by AACOM. Data from LECOM will be included in the 1995 issue of the AACOM Annual Statistical Report.

Statistics from the previous year cited for comparison purposes may differ from those actually published in the November 1993 issue of the

Table 1
Full-Time Faculty Assignments by Discipline*

	% of Faculty assigned				
Discipline	1992-1993	1994-1994			
Anatomy	8.6	9.1			
Anesthesiology	2.2	1.1			
Biochemistry	4.9	5.6			
Emergency medicine	2.8	2.9			
General practice/					
family medicine	17.6	16.7			
Geriatrics		1.1			
Internal medicine	10.2	11.2			
Microbiology	4.9	5.1			
Obstetrics/gynecolgy	2.5	2.2			
Osteopathic principles	4.0	4.6			
Pathology	3.2	2.6			
Pediatrics	3.9	4.1			
Pharmacology	4.8	4.9			
Physiology	4.8	5.3			
Psychiatry	5.1	5.3			
Radiology	3.3	1.8			
Surgery	2.4	2.7			
Other†	13.7	13.7			

*Source AACOM 1993, 1994 Annual Statistical Reports.
† Includes Dermatology, Neurology, Ophthalmology, Orthopedic Surgery, Otolaryngology, Physical Medicine/Rehabilitation, and Urology. Geriatrics was included in the Other category in 1992–1993.

Table 2
Applicants to Osteopathic Schools Participating in the AACOM Application Service—
Ethnic Groups and Women by Entering Year*

Group	1985	1987	1989	1991	1992	1993	1994
African-American	145	170	221	252	294	325	401
Hispanic [†]	170	165	177	172	233	305	390
Native American	21	19	20	21	49	59	84
Total under-represented minority	336	354	418	445	576	689	875
Percent under-represented minority	8.7	10.6	13.2	10.7	10.0	9.2	9.4
White, non-Hispanic	3,292	2,637	2,342	3,024	4,240	5,461	6,605
Asian American/ Pacific Islander	201	288	338	584	768	1,083	1,496
Other and unknown	40	47	62	110	168	273	360
Total all groups	3,869	3,326	3,160	4,163	5,752	7,506	9,336
No. of women among total applicants	1,102	1,002	1,068	1,393	2,017	2,753	3,494
Percent women	28.5	30.1	33.8	33.5	35.1	36.7	37.4

*Source: AACOM Annual Statistical Report. Figures reported here do not include applicants who applied directly to osteopathic medical colleges. The LECOM will be an AACOMAS participant in 1995.

†Starting in 1984, white non-Hispanic may include about 1% of applicants who did not provide ethnic identification.

JAOA. Any differences may be attributed, in part, to updating that occurred after the publication of the November 1993 issue of the JAOA.

Faculty

Once again, the number of faculty serving the 15 COMs surpassed 7,000. In academic year 1993–1994, 7,751 faculty members were on staff at the 15 COMs. (In academic year 1993–1994, LECOM had 16 full-time faculty on staff. This year [1994–1995] finds 81 full-and part-time faculty members serving the LECOM.) These numbers include full-time, part-time, and volunteer faculty. As was the case last year, most (93.5%) of the faculty serving the COMs can be found teaching the clinical sciences, with the remainder in basic sciences.

Volunteer faculty staffing the 15 COMs continues to grow in number: 65% of the faculty were volunteers in academic year 1993–1994, compared with 62% the year before. Full-time faculty made up 15% of the staff, with part-time faculty comprising 20%. As Table 1 illustrates, family medicine continues a long-standing trend of being the discipline that full-time academicians teach most frequently. This first-place standing held up, despite a small, but actual, decline in the number of full-time academicians teaching family practice medicine: 16.7% in 1993–1994.

In 1992–1993, 17.6% of the full-time faculty taught this discipline. With 11.2% of full-time faculty teaching internal medicine, this discipline remained the second most popular subject being taught at COMs.

Osteopathic medical students Applicants

The number of applicants for the 1994–1995 entering class broke the record of 7,506, set in 1993–1994. The AACOM Application Service tallied 9,336 applicants for the 1994–1995 entering class (*Table 2*). In addition, LECOM reported 334 applicants for the freshman class of 1994–1995.

Although the number of underrepresented minority applicants took a slight upward swing in academic year 1993–1994 (up to 9.4% from 9.2% the previous academic year), their numbers have yet to approach the peak of 13.2%, reported in academic year 1989–1990 (*Figure 1*).

With 3,646 applications received, the Philadelphia College of Osteopathic Medicine (PCOM) remained in first place for the number of applications received in academic year 1993–1994. Rounding out the top five colleges with the most applications received were the Chicago College of Osteopathic Medicine of Midwestern University (CCOM), Ohio University College of Osteopathic Medicine

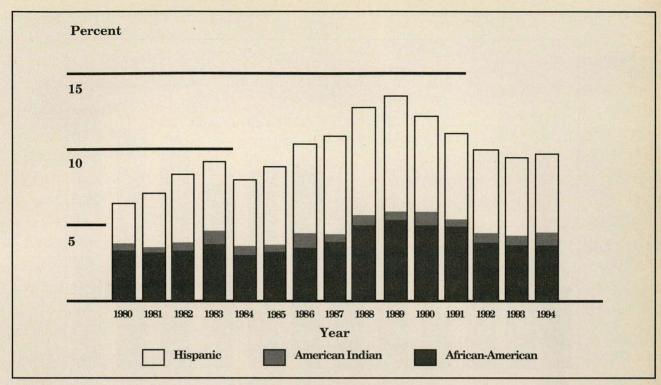


Figure 1. Percentage of ethnic applicants. (Data from AACOM 1994 Statistical Report.)

	No. of applications†		First-year enrollment		Total enrollment	
School	1992-1993	1993–1994	1992-1993	1993-1994	1992-1993	1993-1994
CCOM	2,738	3,639	152	162	546	563
COMP	1,963	2,478	161	163	526	574
KCOM	2,141	3,129	145	152	557	571
LECOM	196			61		61
MSU-COM	1,450	1,989	123	129	508	525
NSUCOM	1,885	2,794	140	145	493	514
NYCOM	1,961	2,694	170	180	661	735
OSU-COM	707	1,376	94	89	296	310
OU-COM	2,564	3,296	119	118	396	407
PCOM	2,809	3,646	225	237	846	878
UHS-COM	2,201	2,966	169	179	563	611
UMDNJ-SOM	1,559	2,033	67	68	245	262
UNECOM	1,807	2,362	80	89	309	328
UNTHSC	1,015	1,595	115	107	416	424
UOMHS	2,370	2,968	206	213	756	798
WVSOM	1,387	1,815	69	70	257	261

^{*}Source: AACOM 1994 Annual Statistical Report.
† The number of applications indicated above is not an unduplicated count of applicants, as in Table 2. The same applicant reported here may be listed by several schools.



Figure 2. Freshman enrollment, alternate years, 1971 to 1993. (Data from AACOM 1994 Annual Statistical Report.)

Table 4 Total Enrollment of Minority Ethnic Groups† Percent by School*						
	Minority					
	1992	-1993	1993-	-1994		
School	No.	%	No.	%		
CCOM	88	16.1	86	15.3		
COMP	155	29.5	175	30.5		
KCOM	91	16.3	92	16.1		
MSU-COM	84	16.5	99	18.9		
NSUCOM	135	27.4	127	24.7		
NYCOM	151	22.8	195	26.5		
OSU-COM	41	13.8	45	14.5		
OU-COM	56	14.1	67	16.5		
PCOM	90	10.6	92	10.5		
UHS-COM	103	18.3	118	19.3		
UMDNJ-SOM	55	22.5	56	21.4		
UNECOM	17	5.5	26	7.9		
UNTHSC	100	24.0	95	22.4		
UOMHS	125	16.5	108	13.5		
WVSOM	21	8.2	16	6.1		
All schools	1,312	17.8	1,397	18.0		

*Source: AACOM 1993 and 1994 Annual Statistical Reports.
† Minority ethnic groups include African-Americans, Hispanic,
Asian/Pacific Islander, and Native American students. LECOM
reported no minority enrollment in 1993–1994.

(OU-COM), Kirksville College of Osteopathic Medicine (KCOM), and the University of Osteopathic Medicine and Health Sciences College of Osteopathic Medicine and Surgery (UOMHS) (Table 3).

Enrollment

The freshman enrollment of 2,162 in 1993–1994 surpassed the highest first-year enrollment, recorded in 1992–1993. An additional 61 freshmen were enrolled at LECOM in 1993–1994 (*Figure 2*).

Minorities

Table 4 indicates that the number of ethnic minorities (African-American, Hispanic, Asian/Pacific Islander, and Native American students) increased slightly in 1993–1994 from the previous year. The 15 COMs reported 1,397 minority students among their enrollment, compared with 1,312 minority students in 1992–1993. No minority students were enrolled at LECOM during 1993–1994. Asian/Pacific Islanders continue to make up the largest segment of the minority population, with more than 800 students attending

Table 5 **Enrollment of Women at Colleges of Osteopathic Medicine***

		Total enrollment			Graduates			
Entering year	Total	No. of women	% Women	Total	No. of women	% Women		
1968	1,879	53	2.8	427	8	1.9		
1969	1,997	59	3.0	432	12	2.8		
1970	2,151	61	2.8	472	11	2.3		
1971	2,304	79	3.4	485	18	3.7		
1972	2,579	116	4.5	649	18	2.8		
1973	2,780	181	6.5	594	17	2.9		
1974	3,139	267	8.5	702	44	6.3		
1975	3,443	362	10.5	809	58	7.2		
1976	3,671	472	12.9	908	84	9.3		
1977	3,926	570	14.5	971	68	7.0		
1978	4,221	688	16.3	1,004	163	16.2		
1979	4,571	789	17.3	1,059	192	18.1		
1980	4,940	971	19.7	1,151	202	17.6		
1981	5,304	1,108	20.9	1,017	186	18.3		
1982	5,822	1,317	22.6	1,317	261	19.8		
1983	6,212	1,526	24.6	1,287	262	20.4		
1984	6,547	1,707	26.1	1,474	344	23.3		
1985	6,608	1,799	27.2	1,560	392	25.1		
1986	6,640	1,853	27.9	1,593	412	25.9		
1987	6,586	1,904	28.9	1,572	438	27.9		
1988	6,614	1,986	30.0	1,609	491	30.5		
1989	6,615	2,056	31.1	1,529	431	28.2		
1990	6,792	2,221	32.7	1,534	458	29.9		
1991	7,012	2,340	33.4	1,532	501	32.7		
1992	7,375	2,512	34.1	1,606	533	33.2		
1993†	7,822	2,714	34.7	1,775‡	617‡	34.8‡		

^{*} Source: AACOM 1994 Statistical Report

the COMs during academic year 1993–1994.

Women

Continuing an upward trend that began in academic year 1968-1969, the number of female osteopathic medical students accounted for 34.7% of all DOs enrolled in the 16 COMs in 1993–1994, for a total of 2,714 female students (Table 5).

Geographic source of first-year students

The trend to seek a medical education in their home state persists among first-year osteopathic medical students. Of the 2,162 first-year students enrolled at the 16 COMs during 1993-1994, 57.5% hailed from the state in which the COM is located. Once again, the University of North Texas Health Sciences Center at Fort Worth-Texas College of Osteopathic Medicine had the highest percentage of in-state students: 96% of all first-year students called Texas home.

Conversely, with 81% of its student body hailing from another state, the University of Osteopathic Medicine and Health Sciences College of Osteopathic Medicine and Surgery had the highest percentage of immigrant freshmen in 1993–1994 (Table 6).

Separately, LECOM reported that during 1993–1994, Pennsylvania was home to 34 of its 61 freshmen. In 1994–1995, more out-of-state students (48) make up the freshman class than do native Pennsylvanians (33).

Students admitted with advanced standing

Again, the baccalaureate degree was the most common advanced degree held by incoming

[†] Includes LECOM, which had 17 women in its class of 61 freshmen.

[#] Estimated.

Table 6 Number of State Residents and Nonresidents Enrolled in 1993–1994 Freshman Year by School*

College	No. of residents	No. of nonresidents	Total No.
CCOM	83	79	162
COMP	80	83	163
KCOM	21	131	152
LECOM	34	27	61
MSU-COM	111	18	129
NSUCOM	97	48	145
NYCOM	152	28	180
OSU-COM	73	16	89
OU-COM	87	31	118
PCOM	164	73	237
UHS-COM	29	150	179
UMDNJ-SOM	63	5	68
UNECOM	47	42	89
UNTHSC	103	4	107
UOMHS	41	172	213
WVSOM	59	- 11	70
Total	1,244†	918	2,162

*Source: AACOM 1994 Annual Statistical Report. †57.5% of all freshmen are enrolled in a COM in their native state.

freshmen in 1993–1994: 88.4% of the entering class that year had earned this degree, up from 86.6% the previous year.

A slight increase was noted in the number of master's degrees already earned by the incoming freshmen of 1993–1994; 7.5% of the incoming class held this degree, compared with 6.6% in 1992–1993. The percentage of freshmen with a doctorate degree increased from 1.7% in 1992–1993 to 2.2% in 1993–1994.

College record of freshmen

Incoming freshmen for 1993–1994 had a mean grade point average (GPA) of 3.26, nearly identical to the 3.20 recorded in 1992–1993.

A revised MCAT examination was first administered in the spring of 1991. The revised version includes a writing sample section, which is scored on a scale of J to T. Mean scores for the revised MCAT examination administered in 1993 were as follows: biology, 7.7; physical science, 7.4; verbal reasoning, 7.7. In 1992, mean

revised MCAT scores were: biology, 7.4; physical science, 7.0; and verbal reasoning, 7.6. For those students who had taken the old MCAT examination, the overall mean score was 5.95, down from 7.3 in 1992–1993.

Incoming LECOM freshmen in 1993–1994 had an overall mean MCAT score of 7.66; in 1994–1995, the overall mean MCAT score dropped fractionally to 7.16.

Student evaluation

The National Board of Osteopathic Medical Examiners examinations are still used to determine student advancement and graduation in some COMs, as are comprehensive examinations. Other means of evaluating student achievement and the adequacy of the education program (or both) are committee evaluations, exit interviews with graduating seniors, and student evaluation of courses.

The AACOM reports that only 1.5% of all enrolled students withdrew or were dismissed from the 15 COMs during 1993–1994, down from 1.7% the previous year.

Osteopathic medical curriculum

Preparing the physicians of tomorrow for the general practice of osteopathic medicine remains the colleges' primary goal. However, no COM overlooks training in areas of special interest. In fact, more classroom hours are being devoted to geriatrics, doctor-patient relationships, nutrition, and rehabilitation. Among the most popular of special interests is the study of the acquired immunodeficiency syndrome. More than 4,000 osteopathic medical students received training in this area during academic year 1993–1994.

The Doctor of Osteopathy (DO) degree is awarded after completion of a 4-year curriculum. During the first 2 years of the curriculum (preclinical instruction) an emphasis is placed on lecture and laboratory work in the basic medical sciences, which include anatomy, biochemistry, histology, physiology, and microbiology.

The last 2 years of undergraduate training involve clinical clerkships. Osteopathic medical students devote most of their clerkship time in the areas of family/community medicine, medicine, surgery, electives, pediatrics, and obstetrics and gynecology.