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, page 1153.)

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 reevaluation approximately every 5 to 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 train future osteopathic physicians (Appendix II, page 1155).

The information presented herein has been adapted from the 1991 Annual Statistical Report, published in August by the American Association of Colleges of Osteopathic Medicine (AACOM). Statistics from the previous year cited for comparison purposes may differ from those actually published in the November 1990 issue of the JAOA. Any differences may be attributed to updating that occurred following the publication of the November 1990 JAOA.

Faculty

In academic year 1990-1991, full-time professors, including associate and assistant professors, accounted for 16.4% of faculty positions, nearly the same number of full-time faculty members who taught the previous year. Fifty-eight percent of the faculty volunteer their services, with the remainder (25.6%) being part-time, paid personnel.

As Table 1 illustrates, general practice/family medicine continues to be the discipline that full-time academicians teach most frequently; 22.5% of the board-certified instructors are certified in this specialty, a slight increase from the previous year.

In academic year 1990-1991, 15.3% of the faculty held the MD degree. During this same year, persons with a DO degree composed nearly 74% of the faculty. These figures include those persons who held more than one degree.

Since academic year 1980-1981, the number of faculty members with at least a DO degree has increased by nearly 10 percentage points, representing a 13% increase. At the same time, the number of faculty members who hold at least an MD degree has declined by nearly 3 percentage points, for an 18% de-

Table 1
Full-Time Faculty Assignments, by Discipline

Discipline	% of faculty assigned	
	1989-1990	1990-1991
Anatomy	8.0	8.3
Anesthesiology	...	2.1
Biochemistry	4.7	4.7
Emergency medicine	2.5	3.3
General practice/family medicine	18.2	17.2
Internal medicine	10.8	10.6
Microbiology	4.8	5.0
Obstetrics/gynecology	3.3	3.1
Osteopathic principles	4.5	4.1
Pathology	2.9	3.0
Pediatrics	4.2	3.9
Pharmacology	5.1	5.3
Physiology	5.2	5.1
Psychiatry	4.5	5.2
Radiology	3.4	3.0
Surgery	3.0	3.1
Other†	14.9	13.0

*Source AACOM 1991 Annual Statistical Report.

†Includes Dermatology, Geriatrics, Neurology, Ophthalmology, Orthopedic Surgery, Otolaryngology, Physical Medicine and Rehabilitation, and Urology.

crease. However, the greatest loss has occurred among the number of faculty members with a PhD degree. In 1990-1991, an 11.5 percentage point decline meant that 61% fewer fac-

ulty members held the PhD degree than during the previous decade.

Osteopathic medical students

Applicants

The number of applicants for the 1991-1992 entering class reached an all-time high of 4,163. This figure represents the number of applicants to the 14 COMs that subscribe to the American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS). For the 1990-1991 academic year, 3,224 applicants applied to 13 COMs that subscribed to the AACOMAS at that time. After making adjustments for the additional COM's subscribing to AACOMAS, AACOM reports that the 1991-1992 entering class represents an almost 22% increase from the previous year.

Of these 1991-1992 applicants, approximately 11% were minorities, compared with nearly 12% of the 1990-1991 entering class. As in the previous year, the number of minority applicants to COMs has declined. This drop in minority applicants ends a generally upward trend in their numbers, as shown in Figure 1.

Figure 1. Percentage of ethnic applicants. (From AACOM 1991 Annual Statistical Report.)

Table 2
Applicants to AACOMAS Osteopathic Medical Schools—Ethnic Groups and Women by Entering Year*

Group	1978	1980	1982	1984†	1985	1986	1987	1988	1989	1990	1991‡
Black American	116	130	150	136	145	159	170	208	221	196	252
American Indian/Alaskan Native	18	15	16	27	21	31	19	20	20	31	21
Hispanic	38	76	128	140	170	164	165	153	177	154	172
Total underrepresented minority	172	221	294	303	336	354	354	381	418	381	445
Percent underrepresented minority	4.9	5.8	7.5	7.3	8.7	10.1	10.6	12.6	13.2	11.8	10.7
White, non-Hispanic	3,299	3,467	3,484	3,633	3,332	2,946	2,684	2,376	2,404	2,493	3,134
Asian American/Pacific Islander	59	98	139	190	201	215	288	273	338	350	584
Total all groups	3,530	3,786	3,917	4,126	3,869	3,515	3,326	3,030	3,160	3,224	4,163
No. of women among total applicants	610	804	965	1,168	1,102	1,010	1,002	966	1,068	1,082	1,393
Percent women	17.3	21.2	24.6	28.3	28.5	28.7	30.2	31.9	33.8	33.6	33.5

*Source: AACOM *Annual Statistical Report*. Figures reported here do not include applicants who applied directly to osteopathic medical colleges.

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

‡Includes data from 14 colleges of osteopathic medicine reporting to AACOMAS.

Table 3
Number of Applications Received, First-Year Enrollment, and Total Enrollment by School*

School	No. of applications†		First-year enrollment		Total enrollment	
	1989–1990	1990–1991	1989–1990	1990–1991	1989–1990	1990–1991
CCOM	1,449	1,557	145	137	441	471
COMP	1,005	987	112	118	423	441
COM/OSU	703	609	79	91	260	273
KCOM	1,012	1,168	150	151	531	542
MSU/COM	798	834	123	132	499	511
NYCOM	1,121	1,065	149	164	549	574
OUCOM	1,242	1,450	107	108	363	366
PCOM	809	890	212	226	813	823
SECOM	901	886	114	122	407	426
TCOM	710	876	111	107	378	372
UHS/COM	576	750	139	171	494	520
UMDNJ/SOM	770	771	62	68	209	213
UNECOM	872	918	79	81	299	293
UOMHS/COMS	1,025	1,286	193	207	713	727
WVSOM	852	881	69	67	236	240
Total	13,845	14,928	1,844	1,950	6,615	6,792

*Source: AACOM *1991 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.

The data in Table 2 indicate that female applicants compose the largest segment of all applicants.

The majority of applicants are applying to osteopathic medical colleges in the Midwest, as seen in Table 3. The Chicago College of Osteopathic Medicine continued to receive the

most applications, totaling 1,557 for 1990–1991. Rounding out the top five colleges with the most applications received were Ohio University College of Osteopathic Medicine, the University of Osteopathic Medicine and Health Sciences College of Osteopathic Medicine and Surgery, Kirksville College of Osteo-

Figure 2. Freshmen enrollment, alternate years, 1968 to 1990. (From AACOM Annual Statistical Report.)

pathic Medicine, New York College of Osteopathic Medicine of New York Institute of Technology, and the College of Osteopathic Medicine of the Pacific.

Enrollment

Figure 2 illustrates the generally upward climb the freshmen enrollment has taken since 1969. With an enrollment of 1,950, the class of 1990 surpassed the record-high enrollment of 1,844, set the previous year.

Minorities

Table 4 indicates that the ethnic minority population in 1990-1991 accounted for 16.4% of total enrollment, an increase of 2.5 percentage points over 1989-1990. The 15 COMs reported 1,112 minority students as members of the total student body. Students of Asian and Pacific Islander descent made up the largest segment of this population, totaling 52%.

Women

The number of female students continues to increase. In 1980, 19.7% of all osteopathic medical students were women. Ten years later that figure climbed to 32.7%, up 65.9% (Table 5).

Geographic source of students

Although most students continue to choose to attend an osteopathic medical school in their home state, more of them are venturing out of state for their osteopathic medical education. In 1989-1990, 60.3% of students attended an osteopathic medical school in their home state, compared with 59.3% of the students during 1990-1991. Once again, Texas College of Osteopathic Medicine has the highest proportion of state residents as students: only 4% are from out-of-state (Table 6).

Conversely, with 82% of their student body hailing from out-of-state, the University of Osteopathic Medicine and Health Sciences College of Osteopathic Medicine and Surgery in Des Moines and the University of Health Sciences, College of Osteopathic Medicine in Kansas City had the highest percentage of non-resident students in 1990-1991.

Students admitted with advanced standing

The baccalaureate degree was the highest degree earned by 85.2% of the 1990-1991 incoming freshmen, a slight decline from 1989-1990, when 86.1% of the freshmen class had earned

Table 4
Total Enrollment of Minority Ethnic Groups†
Percent by School*

School	Minority			
	1989–1990		1990–1991	
	No.	%	No.	%
CCOM	60	13.6	71	15.1
COM/OSU	37	14.2	45	16.5
COMP	96	22.7	109	24.7
KCOM	58	10.9	75	13.8
MSU/COM	82	16.4	89	17.4
NYCOM	91	16.6	112	19.5
OUCOM	35	9.6	44	12.0
PCOM	66	8.1	81	9.8
SECOM	86	21.1	100	23.5
TCOM	73	19.3	82	22.0
UHS/COM	65	13.2	44	20.7
UMDNJ/SOM	37	17.7	9	3.1
UNECOM	11	3.7	102	19.6
UOMHS/COM	105	14.7	132	18.2
WVSOM	19	8.1	17	7.1
All schools	921	13.9	1,112	16.4

*Source: AACOM 1990 and 1991 Annual Statistical Reports.

†Minority ethnic groups include Black, Hispanic, Asian/Pacific Islander, and Native American students.

Table 5
Women Enrollment*

Entering year	Total enrollment			Graduates		
	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	1,474†	392	26.6
1986	6,640	1,853	27.9	1,589†	412	25.9
1987	6,586	1,904	28.9	1,584†	395	24.9
1988	6,614	1,986	30.0	1,581†	485	30.7
1989	6,615	2,056	31.1	1,612†	430	26.7
1990	6,792	2,221	32.7	1,533	465†	30.1†

*Source: AACOM 1991 Statistical Report and AOA data base.†

†Estimated

Table 6
Number of State Residents and Nonresidents
Enrolled, by School*

College	Resident	Nonresident	Total
CCOM	274	197	471
COMOSU	251	22	273
COMP	306	135	441
KCOM	71	471	542
MSU/COM	438	73	511
NYCOM	416	158	574
OUCOM	323	43	366
PCOM	572	251	823
SECOM	304	122	426
TCOM	357	15	372
UHS/COM	95	425	520
UMDNJ/SOM	189	24	213
UNECOM	149	144	293
UOMHS/COMS	132	595	727
WVSOM	148	92	240
Total	4,025[†]	2,767	6,792

*Source: AACOM 1991 Annual Statistical Report.
[†]59.3% of all students are enrolled in their own state.

this degree. Similarly, only 5.6% of the incoming 1990-1991 freshmen had earned a master's degree, compared with 6.2% in 1989-1990. However, a slight increase did occur in the number of incoming freshmen with a doctorate degree: 1.7% of the 1990-1991 incoming freshmen held this advanced degree, compared with 1.1% the previous year.

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 2.7% of all enrolled students withdrew or were dismissed from COMs during 1990-1991.

Osteopathic medical curriculum

Preparing the physicians of tomorrow for gen-

eral practice of osteopathic medicine remains the colleges' primary goal. However, no COM overlooks training in specialized medicine.

The DO degree is awarded after completion of a 4-year curriculum. During the first 2 years, the basic sciences—anatomy, biochemistry, embryology, histology, immunology, microbiology, pathology, and physiology—are emphasized.

Clinical practice, in the form of preceptorships, clerkships, and clinical rotations, occurs in the third and fourth years of the osteopathic medical school curriculum.

Each college has a different policy concerning electives. Most schools allow students to take electives during their third year, and at least one college allows freshmen to do so. Senior students may also devote part of their curriculum to electives. Specialized or advanced training courses constitute acceptable electives.

Areas of specialized training in which undergraduate osteopathic medical students log the most classroom hours are doctor/patient relationships, geriatrics, and nutrition.