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 1033).

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. 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 college of osteopathic medicine (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.

The Basic Standards for Accreditation are published annually in the *AOA Yearbook and*

Directory of Osteopathic Physicians, and copies are available from the AOA Department of Education.

Currently, 15 fully accredited colleges of osteopathic medicine train future osteopathic physicians (Appendix II, page 1035).

At press time, the statistics discussed in the following sections were the most current as compiled by the American Association of Colleges of Osteopathic Medicine (AACOM).

Faculty

In academic year 1989-1990, full-time professors, including associate and assistant professors, accounted for 16.6% of faculty positions, nearly the same number of full-time faculty members who taught the previous year. Slightly more than 60% of the faculty volunteer their services, with the remainder 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;

Table 1
Full-Time Faculty Assignments, by Discipline*

Discipline	% of faculty assigned
General practice/family medicine	18.2
Internal medicine	10.8
Surgery	3.0
Radiology	3.4
Pediatrics	4.2
Psychiatry	4.5
Obstetrics/gynecology	3.3
Pathology	2.9
Physiology	5.2
Anatomy	8.0
Biochemistry	4.7
Microbiology	4.8
Pharmacology	5.1
Osteopathic principles	4.5
Emergency medicine	2.5
Other	14.9

*Source: AACOM 1990 Annual Statistical Report.

Percentages

Figure 1. *Percentage of ethnic applicants. (From AACOM 1990 Statistical Report.)*

21.3% of the board-certified instructors are certified in this specialty.

The number of full-time MD faculty members dropped by 1 percentage point. In academic year 1989-1990, 13% of the total faculty were MDs. During this same year, DOs composed 66% of the faculty, down from more than 75% in 1988-1989. Seven percent of the faculty held a doctorate degree. (These figures do not represent those persons who hold more than one degree.)

Osteopathic medical students

Applicants

In the 1989-1990 academic year, 3,224 candidates sought an osteopathic medical education, up from 3,160 applicants the year before. Of these applicants, 11.8% were minorities, a 1.4% decline from the previous year. Despite this slight decline, overall the number of minority applicants has risen since 1977, as shown in Figure 1.

The statistics in Table 2 indicate that female applicants still compose the largest segment of underrepresented 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 received the most applications totaled for 1989-1990. Rounding out the top five colleges with the most applications received were Ohio University College of Osteopathic Medicine, New York College of Osteopathic Medicine of New York Institute of Technology, the University of Osteopathic Medicine and Health Sciences College of Osteopathic Medicine and Surgery, and Kirksville College of Osteopathic Medicine.

Enrollment

Figure 2 illustrates the generally upward climb the freshmen enrollment has taken since 1969. With an enrollment of 1,844, the Class of 1989 reached an all-time high.

Minorities

Table 4 indicates that the ethnic minority population in 1989-1990 accounted for 13.9% of total enrollment. The 15 colleges of osteopathic medicine report 921 minority students as members of the total student body.

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

Group	1976	1978	1980	1982	1984†	1985	1986	1987	1988	1989	1990
Black American	59	116	130	150	136	145	159	170	208	221	196
American Indian/Alaskan	14	18	15	16	27	21	31	19	20	20	31
Native	33	38	76	128	140	170	164	165	153	177	154
Hispanic											
Total underrepresented minority	106	172	221	294	303	336	354	354	381	418	381
Percent underrepresented minority	2.9	4.9	5.8	7.5	7.3	8.7	10.1	10.6	12.6	13.2	11.8
White, non-Hispanic	3,539	3,299	3,467	3,484	3,633	3,332	2,946	2,684	2,376	2,404	2,493
Asian American/Pacific Islander	62	59	98	139	190	201	215	288	273	338	350
Total all groups	3,707	3,530	3,786	3,917	4,126	3,869	3,515	3,326	3,030	3,160	3,224
No. of women among total applicants	‡	610	804	965	1,168	1,102	1,010	1,002	966	1,068	1,082
Percent women	‡	17.3	21.2	24.6	28.3	28.5	28.7	30.2	31.9	33.8	33.6

*Source: AACOM Annual Statistical Report.

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

‡ Not available.

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

School	No. of applications†		First-year enrollment		Total enrollment	
	1988–1989	1989–1990	1988–1989	1989–1990	1988–1989	1989–1990
CCOM	645	1,449	126	145	416	441
COM/OSU	543	703	73	79	271	260
COMP	866	1,005	111	112	414‡	423
KCOM	1,170	1,012	138	150	531	531
MSU/COM	731‡	798	123	123	507	499
NYCOM	1,122	1,121	154	149	541	549
OUCOM	1,237	1,242	100	107	377	363
PCOM	830	809	212	212	808	813
SECOM	843	901	111	114	402	407
TCOM	739	710	94	111	391	378
UHS/COM	285	576	134	139	500	494
UMDNJ/SOM	746	770	68‡	62	220	209
UNECOM	943	872	79	79	300	299
UOMHS/COM	1,117	1,025	193	193	703	713
WVSOM	843	852	64	69	233	236
Total	12,660	13,845	1,780	1,844	6,614	6,615

*Source: AACOM 1990 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.

‡Represents corrected statistical information from that which appeared in the November 1989 issue of *JAOA*.

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

School	Minority			
	1988-1989		1989-1990	
	No.	%	No.	%
CCOM	49	11.8	60	13.6
COM/OSU	38	14.0	37	14.2
COMP	85	20.5	96	22.7
KCOM	47	8.9	58	10.9
MSU/COM	89	17.6	82	16.4
NYCOM	84	15.5	91	16.6
OUCOM	42	11.1	35	9.6
PCOM	49	6.1	66	8.1
SECOM	72	17.9	86	21.1
TCOM	62	15.9	73	19.3
UHS/COM	42	8.4	65	13.2
UMDNJ/SOM	29	13.2	37	17.7
UNECOM	16	5.3	11	3.7
UOMHS/COM	91	12.9	105	14.7
WVSOM	18	7.7	19	8.1
All schools	813	12.3	921	13.9

*Source: AACOM 1989 and 1990 Annual Statistical Reports.

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

*Source: AACOM 1990 Statistical Report and AOA data base. †

Figure 2. Freshman enrollment, alternate years, 1969 to 1989. (From annual AACOM Statistical Report.)

Women

The number of female students continues to grow. In 1979, 17.3% of all osteopathic medical students were women. Ten years later that figure climbed to 31.1% (Table 5).

Geographic source of students

As in previous years, most students (60.3%) choose to attend the osteopathic medical school in their home state. Once again, Texas College of Osteopathic Medicine has the highest proportion of native students: only 4.8% are from out of state (Table 6). Conversely, with nearly 86% of its 1989-1990 student body hailing from out-of-state, Kirksville College of Osteopathic Medicine has the highest percentage of nonresident students.

Students who choose to attend the osteopathic medical college in their home state do so because of financial reasons, family ties, and plans for establishing a practice where continuing education is less expensive.

Students admitted with advanced standing

The baccalaureate degree was the highest degree earned by 86.1% of the 1989 incoming

freshmen, a slight increase from 1988. The number of freshmen admitted with a master's degree or a doctorate degree declined to 6.2% and 1.1%, respectively.

Freshmen college record

The mean grade point average for first-year students rose, from 3.13 in 1988 to 3.15 in 1989. In 1989, MCAT average scores for each of the noted disciplines were as follows: biology, 7.6; chemistry, 6.9; physics, 6.9; science, 6.9; reading, 7.1; and quantitative operations, 6.8. Scores for each discipline remained similar to those in 1988.

Student evaluation

Composite class rank, numerical rank, and letter grade determine student evaluation. The AACOM reports nine colleges gauge student progress using results from the National Board Examinations. Three institutions require that students pass Part I of the National Board Examinations for advancement or graduation; at least one requires a passing grade in Part II. Feedback from preceptors and hospital personnel provide further information concerning student performance.

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

College	Resident	Nonresident	Total
CCOM	270	171	441
COMOSU	236	24	260
COMP	295	128	423
KCOM	75	456	531
MSU/COM	416	83	499
NYCOM	434	115	549
OUCOM	327	36	363
PCOM	574	239	813
SECOM	298	109	407
TCOM	360	18	378
UHS/COM	92	402	494
UMDNJ/SOM	189	20	209
UNECOM	144	155	299
UOMHS/COMS	131	582	713
WVSOM	146	90	236
Total	3,987[†]	2,628	6,615

*Source: AACOM 1990 Annual Statistical Report.
[†]60.3% of all students are enrolled in their own state.

Considering these criteria, AACOM reports that only 2.3% of students withdrew or were dismissed from osteopathic medical college during 1989-1990. Academic difficulty was the most-often cited reason for student attrition. In 1988, 2.2% of the students were dismissed or withdrew for similar reasons.

Osteopathic medical curriculum

Preparing the physicians of tomorrow for general practice of osteopathic medicine remains the colleges' primary goal. However, no college of osteopathic medicine 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. Several colleges also offer introductory courses in clinical studies, such as general practice, neurology, obstetrics and gynecology, osteopathic manipulation, pediatrics,

psychiatry, and surgery.

Curricula in several of the colleges incorporate geriatrics and nutrition courses, as well as classes in doctor/patient relationships, medical economics, and computer literacy. AIDS education and alcohol and drug abuse now are receiving more emphasis in many curricula. Ethical issues, risk management, and the impact of sociocultural events are incorporated as well.

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.