

Osteopathic Graduate Medical Education

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Several aspects of osteopathic graduate medical education have gained momentum in recent years. Although the number of 2006 osteopathic graduates dropped slightly compared with the previous year, 2007 graduates totaled 3103, surpassing 3000 for the first time in osteopathic history. A total of 1196 (41%) and 1267 (40%) graduates and previous graduates participated and matched in the American Osteopathic Association (AOA) "Match" program in 2006 and 2007, respectively. With post-Match scramble data, the number of osteopathic graduates and previous graduates in AOA-approved internship positions rose to 1525 (53%) and 1663 (52%) for 2006 and 2007, respectively. Likewise, the number of filled osteopathic residency positions for the 2006-2007 academic year increased by 5%. In light of these increases, the authors compare AOA data with data from the American Council of Graduate Medical Education regarding osteopathic physicians in allopathic residencies. A brief summary of the restructured traditional osteopathic internships, which will go into effect July 1, 2008, is also provided.

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Annual data on osteopathic graduate medical education (OGME) is provided through the American Osteopathic Association (AOA) Intern/Resident Registration Program (ie, the AOA "Match") and the AOA Trainee Information, Verification, and Registration Audit (TIVRA) reporting system. Statistics on the Match in this article are reported for both the 2005-2006 and 2006-2007 academic years. Although Match data does not change, data on programs, number of trainees, and approved positions may change throughout the year as a result of decisions and actions of the AOA Council on Osteopathic Postdoctoral Training (COPT) and the

Program and Trainee Review Council, which meet three times per year to approve residency programs and positions. After the Match takes place, minor changes can occur by individual trainees and programs. Those data are reported on TIVRA, which is completed each fall. The current article discusses these data and highlights the many areas of growth related to OGME.

AOA-Approved First Year of Postdoctoral Training

As previously described,¹ the AOA Board of Trustees and House of Delegates passed a resolution in 2006 for the restructuring of the traditional osteopathic internship (Resolution 19 [A/2006]—Restructuring of the Osteopathic Internship). As a result of the resolution, which goes into effect July 1, 2008, specialty colleges were required to select one of the following three AOA-approved training options:¹⁻³

- **Option 1: AOA OGME-1 Resident (Residency)**—Students will "match" directly into the residency, and the first postdoctoral year will be considered the first year of residency training. Specialties were required to develop curriculum for the first year of training. Specialties that chose this option include anesthesiology; emergency medicine and emergency medicine and internal medicine; family practice, family practice and emergency medicine, and integrated family practice and neuromusculoskeletal medicine; internal medicine; obstetrics and gynecology; orthopedic surgery; otolaryngology and otolaryngology and facial plastic surgery; pediatrics and pediatrics internal medicine; and general surgery, neurological surgery, and urological surgery.
- **Option 2: AOA OGME-1 Preliminary (Internship)**—Programs require completion of a designated preliminary year of training (ie, an internship) as a prerequisite for entry into the first year of residency in the second postdoctoral year of training. Students who match successfully into such programs are ensured entry into both the preliminary year and the subsequent first year in residency training. In most cases, both training periods will be offered in the same institution or in an affiliate institution. Specialties that chose this option include diagnostic radiology and radiation oncology, neurology, neuromusculoskeletal medicine and osteopathic manipulative medicine, ophthalmology, pathology, and psychiatry.

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Table 1
AOA Registration Program: Intern Match Participants Matched to First Choice Osteopathic Medical Internship Positions by COM*

COM	Class of 2006 Graduates, No.†	2006 AOA Match*		Class of 2007 Graduates, No.†	2007 AOA Match*	
		Matched, No.	Matched With First Choice, No.		Matched, No.	Matched With First Choice, No.
DMU-COM	202	71	66	189	53	45
KCOM-ATSU	156	60	55	156	51	47
KCUMB-COM	212	57	54	226	75	63
LECOM	204	112	92	230	127	103
MSUCOM	113	97	92	136	113	107
MWU/AZCOM	138	34	29	132	28	25
MWU/CCOM	164	48	42	181	56	50
NSU-COM	184	73	66	189	81	66
NYCOM	252	118	100	307	113	97
OSU-COM	92	45	42	83	41	36
OU-COM	105	56	54	102	46	42
PCOM	245	148	118	239	151	123
PCSOM	58	27	23	71	36	35
TUCOM-CA	117	30	26	136	43	38
UMDNJ-SOM	89	55	47	91	49	43
UNECOM	124	41	37	111	34	28
UNTHSC/TCOM	115	26	18	126	22	22
VCOM	NA	NA	NA	144	52	48
WesternU/COMP	154	43	34	155	45	36
WVSOM	90	55	50	99	51	43
Total	2814	1196[§]	1045	3103	1267[§]	1097

* Table data appears differently in the current article compared with previous editions of this article^{1,4-8} to provide further distinction between the total current graduates and graduates from previous years who took part in each year's American Osteopathic Association (AOA) Intern/Resident Registration Program (ie, the AOA "Match").

† Class of 2006 total of 2814 graduates does *not* include 72 graduates from previous years. Class of 2007 total of 3103 graduates does *not* include 70 graduates from previous years. A total of 2886 graduates and previous graduates participated in the 2006 AOA Match, and a total of 3175 graduates and previous graduates participated in the 2007 AOA Match.

‡ Total graduates matched and matched with first choice during both the 2006 and 2007 AOA Match do *not* include military Match participants or data from the post-Match scramble. However, these data *do* include graduates from previous years. Percentages cannot be calculated because data for previous graduates by each college of osteopathic medicine (COM) are not available.

§ Of 2886 graduates and previous graduates that participated in the 2006 Match, 329 (11%) matched to AOA internships as a result of the post-Match scramble, bringing the total of graduates matched to AOA programs to 1525 (53%). In 2007, the post-Match scramble brought an additional 396 (12%) of 3175 graduates and previous graduates to AOA programs, bringing the 2007 total to 1663 (52%).

Abbreviations: NA, not applicable. The full names of the COMs and branch campuses appear with their abbreviations, locations, and dates established on pages 167-169 of this issue of *JAOA—The Journal of the American Osteopathic Association*.

■ **Option 3: AOA OGME-1 Traditional (Internship)**—Specialties that have chosen this option require residents to complete a traditional, stand-alone rotating internship. This option is particularly suitable for students who are either undecided on their future plans or who plan on entering residencies accredited by the American Council on Graduate

Medical Education (ACGME). Students completing a traditional rotating internship and then selecting option 1 or 2 specialties must contact that specialty college to determine whether advanced standing will be granted. This option will depend on available residency positions because most will have been filled with trainees who matched during the

first year and are advancing to their second postgraduate year. Specialties that chose this option include dermatology, occupational and preventive medicine, physical medicine and rehabilitation, preventative medicine and public health, and proctology.

The requirements for traditional rotating internships remain unchanged.¹⁻³ Fourth year osteopathic medical students have responded positively to these changes, as evidenced by preliminary data that show a 13% increase in the number of students participating in the 2008 AOA Match. In addition, the number of applications submitted to osteopathic training programs through the Electronic Residency Application Service increased by 34% this year. Additional data on the impact of the restructuring, including the number of programs and trainees selecting each option, will be available in the *THE JOURNAL*'s 2009 Medical Education issue. Specific requirements of each specialty are available on DO-Online under Postdoctoral Training under the Education tab.

The Match: Academic Years 2005-2006 and 2006-2007

In 2007, for the first time in the history of osteopathic medicine, the number of COM graduates surpassed 3000 (*Table 1*). There were a total of 3103 COM graduates in 2007 compared with 2826 graduates in 2005 and 2814 in 2006. These data represent a 10% increase in the number of COM graduates compared with the previous year. This increase is partly attributable to 144 graduates of the Virginia College of Osteopathic Medicine in Blacksburg—the school's first graduating class.

A total of 1196 (41%) graduates from the class of 2006 and previous graduates matched into internships through the AOA Match, with 1045 graduates (87%) matching to their first choice (*Table 1*). An additional 329 graduates (11%) successfully matched to AOA positions in the post-Match scramble, raising the total number of trainees in osteopathic positions to 1525 (53%). In the 2006-2007 academic year, 1267 (40%) graduates and previous graduates matched into internships through the AOA Match, with 1097 graduates (87%) matching into their first choice. An additional 396 graduates (12%) matched to AOA positions during the post-Match scramble. Accordingly, the total number of trainees matched to osteopathic positions in 2007 increased to 1663 (52%). From the 2004-2005 to 2006-2007 academic years, the number of students entering osteopathic training programs increased over 10%, but because of the simultaneously increasing number of graduating students, the market share shows only a 1.5% increase.

As in previous years, traditional internship programs had the highest Match numbers among osteopathic medical graduates (*Table 2* and *Table 3*).^{1,4} However, the data for next year's programs are expected to change substantially as a result of the restructuring of the traditional osteopathic internship, as previously described.

There has been significant growth in the number of osteopathic students electing to train in the military in the past several years. In 2003, 48 graduates (1.8%) matched into military training positions. That number rose to 211 (7.3%) in 2006 and then to 226 (6.8%) in 2007. Osteopathic physicians trained in the military have the option to become board certified in their specialty by either the AOA or the American Board of Medical Specialties (ABMS). Between 2003 and 2007, 247 osteopathic physicians have applied for approval of their military training for AOA certification.

The AOA has established mechanisms by which osteopathic physicians may obtain approval for training provided through the ACGME (Resolution 42 [A/2000]—Approval of ACGME Training as an AOA-Approved Internship). This approval is key for those osteopathic physicians seeking medical licensure in states requiring an osteopathic internship and for those physicians desiring osteopathic board certification. Between July 2001 and December 2007, a total of 1603 osteopathic physicians have petitioned the AOA for approval of their first year of ACGME postgraduate training, of which 1217 (76%) have been approved. An additional 369 requests (23%) have been given approval, "pending completion of the requirements." In addition, 10 applicants (<1%) have been denied, and 7 (<1%) withdrew their requests.

Osteopathic Graduate Medical Education Programs

As noted elsewhere, annual data on OGME is reported using information gathered from the AOA's Intern/Resident Registration Program and data reported by AOA-approved residency programs using the AOA's TIVRA reporting system. Although data from the Match does not change in a given year, program data does change because the AOA COPT and the Program and Trainee Review Council meet three times per year to approve residency programs and positions. Program data reported in the present article are current as of May 31, 2007, and will be finalized in *THE JOURNAL*'s 2009 Medical Education issue.

In the 2006-2007 academic year, 11,140 osteopathic physicians were in either osteopathic or allopathic (ie, ACGME-accredited) postdoctoral training programs (*Figure 2*).^{1,4-14} A total of 4511 trainees (40%) were in AOA-approved programs and 6629 (60%) were in ACGME programs.¹⁰ This number represents a slightly higher number of osteopathic physicians attending osteopathic programs during the 2005-2006 academic year, when 4020 (38%) osteopathic trainees were in AOA programs and 6474 (62%) were in ACGME programs.¹¹

In addition, there were 90 residency training programs in 2006 that were dually accredited by the AOA and the ACGME as well as 19 parallel training programs that were AOA approved but occurred side-by-side with ACGME training programs in the same institution. Trainees who complete dual programs have the option to become board certified by either

Table 2
AOA Intern/Resident Registration Program:
Intern Match Summary for the Class of 2006 by COM and Program Type

Internship Type	COM, No. (%)*									
	DMU-COM	KCOM-ATSU	KCUMB-COM	LECOM	MSUCOM	MWU/AZCOM	MWU/CCOM	NSU-COM	NYCOM	OSU-COM
Anesthesiology	2 (3)	1 (2)	0	0	0	1 (3)	0	0	0	1 (2)
Diagnostic radiology	1 (1)	0	0	1 (1)	4 (4)	0	1 (2)	0	0	0
Emergency medicine	3 (4)	1 (2)	8 (14)	5 (4)	6 (6)	2 (6)	1 (2)	1 (2)	8 (7)	6 (13)
Family practice	5 (7)	8 (13)	4 (7)	13 (12)	10 (10)	1 (3)	1 (2)	8 (12)	5 (4)	10 (22)
Internal medicine†	7 (10)	3 (5)	7 (12)	8 (7)	19 (20)	3 (9)	3 (6)	10 (15)	9 (8)	5 (11)
Internal medicine (Pediatrics) †	0	0	0	0	0	0	0	0	0	0
Obstetrics and gynecology†	1 (1)	4 (7)	3 (5)	2 (2)	5 (5)	1 (3)	1 (2)	1 (2)	0	2 (4)
Otolaryngology and facial plastic surgery†	3 (4)	1 (2)	4 (7)	1 (1)	1 (1)	0	0	0	2 (2)	0
Pediatric†	2 (3)	2 (3)	0	2 (2)	5 (5)	2 (6)	1 (2)	1 (2)	7 (6)	2 (4)
Psychiatry	1 (1)	0	0	0	1 (1)	0	0	1 (2)	0	0
Traditional rotating	43 (61)	38 (63)	31 (54)	78 (70)	45 (47)	21 (64)	39 (81)	43 (66)	82 (71)	17 (38)
Surgery	2 (3)	2 (3)	0	2 (2)	0	2 (6)	1 (2)	0	3 (3)	2 (4)
Urological surgery†	0	0	0	0	0	0	0	0	0	0
Matched, No.	70	60	57	112	96	33	48	65	116	45

(continued)

* Some percentages do not total 100 because of rounding.

† Indicates specialty track internship specialties. Except for traditional rotating internships, all other internship program types listed are special emphasis internship specialties. Pathology, though it is not included in this table, is also a special emphasis internship specialty.

‡ A total of 1176 graduates in 2006 participated in the American Osteopathic Association Intern/Resident Registration Program (ie, the AOA "Match") and were matched to internships. This total does not include previous graduates, military match participants, or data from the post-Match scramble.

Abbreviations: AOA, American Osteopathic Association; COM, college of osteopathic medicine; NA, not applicable. The full names of the COMs and branch campuses appear with their abbreviations, locations, and dates established in Appendix 1 on pages 167-169 of this issue of *JAOA—The Journal of the American Osteopathic Association*.

or both the AOA and the ABMS. Trainees who complete parallel programs are only eligible to become AOA-board certified.

As reported last year,¹ approximately 75% of all AOA-approved internship training positions are located in seven states: Florida, Illinois, Michigan, New Jersey, New York, Ohio, and Pennsylvania (Table 4). Although some states had fewer positions compared with 2005-2006 data, 10 states had an increase of approved positions (Figure 3). As a result, there was a total increase of 31 positions in the 2006-2007 academic year—a 1% increase from the previous year.

The number of AOA-approved first year positions decreased slightly from 2704 in the 2005-2006 academic year to 2688 in the 2006-2007 academic year. Although a number of training positions were lost as a result of program closures, the

Program and Trainee Review Council approved 644 new positions between April 2007 and November 2007. Funded positions give a better perspective on change than approved positions, which may or may not be funded. In 2005, 2165 positions were funded, 2206 positions were funded in 2006, and 2189 positions were funded in 2007. The fill rates for these funded positions were 68%, 69%, and 76%, respectively. As of January 2, 2008, 633 programs were registered to participate in the AOA Match with a total number of 2456 positions available for the 2330 COM graduates who registered for the Match.

In the 2006-2007 academic year, there were 665 approved AOA residency programs (Table 5) compared with 648 AOA-approved residency programs in the 2005-2006 academic year and 569 approved programs in the 2004-2005 academic year. Although there were 6045 positions available in the 2006-2007

Table 2 (continued)
AOA Intern/Resident Registration Program:
Intern Match Summary for the Class of 2006 by COM and Program Type

Internship Program Type	COM, No. (%)*										Total
	OU-COM	PCOM	PCSOM	TUCOM-CA	UMDNJ-SOM	UNECOM	UNTHSC/TCOM	VCOM	WesternU/COMP	WVSOM	
Anesthesiology	0	0	1 (4)	1 (3)	0	0	0	NA	0	0	7
Diagnostic radiology	0	0	0	0	0	0	0	NA	0	0	7
Emergency medicine	3 (5)	2 (1)	2 (7)	2 (7)	2 (4)	1 (3)	2 (8)	NA	0	1 (2)	56
Family practice	7 (13)	14 (10)	4 (15)	4 (13)	7 (13)	10 (25)	4 (15)	NA	3 (7)	8 (15)	126
Internal medicine†	5 (9)	12 (8)	3 (11)	3 (10)	3 (6)	1 (3)	3 (12)	NA	6 (14)	10 (18)	120
Internal medicine (Pediatrics)†	0	0	0	0	0	0	0	NA	0	1 (2)	1
Obstetrics and gynecology†	2 (4)	2 (1)	1 (4)	1 (3)	1 (2)	0	0	NA	3 (7)	2 (4)	32
Otolaryngology and facial plastic surgery†	1 (2)	1 (1)	0	1 (3)	0	0	0	NA	0	0	15
Pediatrics†	0	9 (6)	1 (4)	0	5 (9)	1 (3)	0	NA	0	1 (2)	41
Psychiatry	0	0	0	0	2 (4)	0	0	NA	0	0	5
Traditional rotating	37 (67)	105 (72)	15 (56)	17 (57)	32 (60)	26 (65)	17 (65)	NA	29 (69)	31 (56)	746
Surgery	0	1 (1)	0	1 (3)	1 (2)	1 (3)	0	NA	1 (2)	0	19
Urological surgery†	0	0	0	0	0	0	0	NA	0	1 (2)	1
Matched, No.	55	146	27	30	53	40	26	NA	42	55	1176‡

* Some percentages do not total 100 because of rounding.

† Indicates specialty track internship specialties. Except for traditional rotating internships, all other internship program types listed are special emphasis internship specialties. Pathology, though it is not included in this table, is also a special emphasis internship specialty.

‡ A total of 1176 graduates in 2006 participated in the American Osteopathic Association Intern/Resident Registration Program (ie, the AOA "Match") and were matched to internships. This total does not include previous graduates, military match participants, or data from the post-Match scramble.

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academic year, slightly fewer than half of the positions (2989 [49%]) were filled. However, this data represents an improvement from the previous year, in which only 2535 (44%) of 5766 positions were filled.

Conclusion

Postdoctoral residency training continues to demonstrate positive growth. It is expected that the growing number of COMS, located in geographic regions where osteopathic opportunities have been limited, will positively impact growth. In addition, several initiatives are underway to support growth in post-doctoral training.¹⁵⁻¹⁸ The AOA OGME Development Initiative has been breaking ground with hospitals that are eligible for funding from the Centers for Medicare and Medicaid Services, particularly hospitals in states that currently have few OGME positions available.¹⁵ Advisors are available to assist

interested stakeholders to understand financial and academic requirements needed to start new programs through this initiative. Both new and existing COMs that are located in underserved geographic regions have developed programs and initiatives to provide additional training programs for their graduates and others who hope to relocate to these areas.¹⁶ The Medical Education Summit II, held in November 2007 in Lombard, Ill, focused the 3-day agenda entirely on OGME.^{17,18} Together, leaders in the osteopathic medical profession and particularly osteopathic medical education continue to develop recommendations and prioritize actions that will enhance OGME and ultimately move the profession forward.

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Table 3
AOA Intern/Resident Registration Program:
Intern Match Summary for the Class of 2007 by COM and Program Type

Internship Type	COM, No. (%)*									
	DMU-COM	KCOM-ATSU	KCUMB-COM	LECOM	MSUCOM	MWU/AZCOM	MWU/CCOM	NSU-COM	NYCOM	OSU-COM
Anesthesiology	0	2 (4)	1 (1)	0	1 (1)	0	0	0	0	1 (2)
Diagnostic radiology	1 (2)	1 (2)	0	0	1 (1)	0	1 (2)	0	0	0
Emergency medicine	4 (8)	4 (8)	11 (15)	5 (4)	6 (5)	2 (8)	3 (5)	2 (3)	16 (14)	6 (15)
Family practice	3 (6)	6 (12)	4 (5)	16 (13)	14 (12)	4 (15)	2 (4)	4 (5)	14 (13)	10 (24)
Internal medicine†	5 (10)	7 (14)	12 (16)	17 (13)	23 (20)	3 (12)	4 (7)	16 (20)	1 (1)	5 (12)
Internal medicine (Pediatrics) †	0	1 (2)	0	0	0	0	0	0	0	0
Obstetrics and gynecology†	3 (6)	3 (6)	2 (3)	2 (2)	12 (11)	0	0	6 (8)	6 (5)	1 (2)
Otolaryngology and facial plastic surgery†	4 (8)	1 (2)	1 (1)	0	3 (3)	0	1 (2)	0	0	1 (2)
Pediatrics†	2 (4)	2 (4)	1 (1)	0	7 (6)	0	0	1 (1)	6 (5)	3 (7)
Psychiatry	0	0	0	1 (1)	1 (1)	0	0	0	0	0
Traditional rotating	26 (51)	21 (42)	42 (56)	84 (67)	44 (39)	17 (65)	43 (78)	48 (60)	66 (59)	12 (29)
Surgery	3 (6)	2 (4)	1 (1)	1 (1)	1 (1)	0	1 (2)	3 (4)	2 (2)	2 (5)
Urological surgery†	0	0	0	0	0	0	0	0	0	0
Matched, No.	51	50	75	126	113	26	55	80	111	41

(continued)

* Some percentages do not total 100 because of rounding.

† Indicates specialty track internship specialties. Except for traditional rotating internships, all other internship program types listed are special emphasis internship specialties. Pathology, though it is not included in this table, is also a special emphasis internship specialty.

‡ A total of 1250 graduates in 2007 participated in the American Osteopathic Association Intern/Resident Registration Program (ie, the AOA "Match") and were matched to internships. This total does not include previous graduates, military match participants, or data from the post-Match scramble.

Abbreviations: AOA, American Osteopathic Association; COM, college of osteopathic medicine; NA, not applicable. The full names of the COMs and branch campuses appear with their abbreviations, locations, and dates established in Appendix 1 on pages 167-169 of this issue of *JAOA—The Journal of the American Osteopathic Association*.

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Table 3 (continued)
AOA Intern/Resident Registration Program:
Intern Match Summary for the Class of 2007 by COM and Program Type

Internship Program Type	COM, No. (%)*										Total
	OU-COM	PCOM	PCSOM	TUCOM-CA	UMDNJ-SOM	UNECOM	UNTHSC/TCOM	VCOM	WesternU/COMP	WVSOM	
Anesthesiology	0	0	1 (3)	0	0	1 (3)	0	0	0	1 (2)	8
Diagnostic radiology	0	0	0	0	0	0	1 (5)	0	2 (5)	0	7
Emergency medicine	4 (9)	3 (2)	0	1 (2)	1 (2)	0	0	2 (4)	2 (5)	1 (2)	73
Family practice	7 (15)	9 (6)	4 (11)	4 (9)	7 (14)	3 (9)	6 (27)	6 (12)	2 (5)	5 (10)	130
Internal medicine†	4 (9)	27 (18)	2 (6)	10 (23)	9 (18)	2 (6)	3 (14)	6 (12)	4 (10)	7 (14)	167
Internal medicine (Pediatrics) †	0	1 (1)	0	0	0	0	0	1 (2)	0	0	3
Obstetrics and gynecology†	3 (7)	2 (1)	0	0	0	0	1 (5)	2 (4)	5 (12)	1 (2)	49
Otolaryngology and facial plastic surgery†	0	2 (1)	2 (6)	0	0	0	1 (5)	0	0	0	16
Pediatrics†	3 (7)	4 (3)	2 (6)	0	1 (2)	0	0	0	1 (2)	1 (2)	34
Psychiatry	0	0	1 (3)	0	1 (2)	0	0	0	0	0	4
Traditional rotating	25 (54)	102 (68)	22 (61)	25 (58)	30 (61)	27 (82)	10 (45)	35 (67)	22 (54)	33 (66)	734
Surgery	0	0	2 (6)	3 (7)	0	0	0	0	3 (7)	0	24
Urological surgery†	0	0	0	0	0	0	0	0	0	1 (2)	1
Matched, No.	46	150	36	43	49	33	22	52	41	50	1250*

* Some percentages do not total 100 because of rounding.

† Indicates specialty track internship specialties. Except for traditional rotating internships, all other internship program types listed are special emphasis internship specialties. Pathology, though it is not included in this table, is also a special emphasis internship specialty.

‡ A total of 1250 graduates in 2007 participated in the American Osteopathic Association Intern/Resident Registration Program (ie, the AOA "Match") and were matched to internships. This total does not include previous graduates, military match participants, or data from the post-Match scramble.

Abbreviations: AOA, American Osteopathic Association; COM, college of osteopathic medicine; NA, not applicable. The full names of the COMs and branch campuses appear with their abbreviations, locations, and dates established in Appendix 1 on pages 167-169 of this issue of *JAOA—The Journal of the American Osteopathic Association*.

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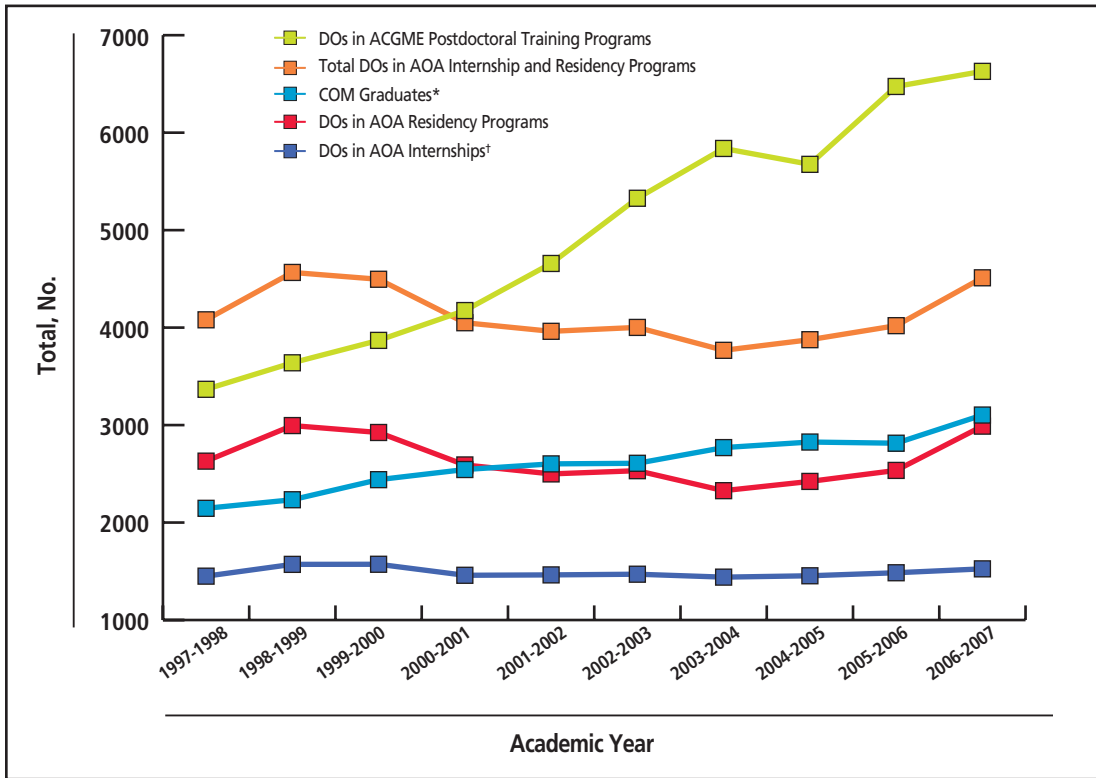


Figure 1. Trends of osteopathic physician (DO) enrollment in both osteopathic and allopathic postdoctoral training programs. Although Match data does not change in a given year, program data does change because the American Osteopathic Association (AOA) Council on Osteopathic Postdoctoral Training and the Program and Trainee Review Council, which have the authority to approve osteopathic medical residency programs and positions, meet three times per year, and newly approved residency programs and positions are added to the AOA database at that time. Therefore, current data for the 2006-2007 academic year are to be considered incomplete and will be finalized in the JAOA's 2009 Medical Education issue. *Total college of osteopathic medicine (COM) graduates do not include previous years' graduates. †Total DOs in AOA internships include trainees who matched to osteopathic internship positions during both the Match and post-Match scramble. **Sources:** AOA Intern/Resident Contracts received by the AOA Division of Postdoctoral Training for the academic years shown; and AOA's Trainee Information, Verification, and Registration Audit system, academic year 2006-2007. Data for academic years 1997-1998 through 2005-2006 were previously published in the JAOA—The Journal of the American Osteopathic Association^{1,4-9} and JAMA.¹⁰⁻¹⁴

Table 4
AOA Registration Program:
Number of Approved Osteopathic Medical Internship Positions
by State and Academic Year, 2002-2007*

State	Academic Year				
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
Alabama	0	8	8	8	0
Alaska	NA	NA	NA	3	3
Arizona	41	37	37	33	20
Arkansas	9	8	8	8	4
California	68	80	77	85	76
Colorado	11	11	8	4	4
Connecticut	15	13	13	13	13
Delaware	14	19	19	19	19
Florida	146	164	156	146	179
Georgia	11	11	11	11	14
Illinois	80	122	132	132	137
Indiana	19	15	16	15	15
Iowa	6	10	10	10	10
Kansas	12	24	24	24	12
Kentucky	32	44	44	44	44
Louisiana	0	2	2	2	2
Maine	25	27	27	30	30
Massachusetts	28	22	22	21	21
Michigan	392	477	503	510	522
Minnesota	0	14	14	10	4
Mississippi	0	6	6	0	0
Missouri	66	65	57	57	59
Nevada	6	10	32	32	32
New Hampshire	0	4	4	4	4
New Jersey	178	188	201	196	196
New Mexico	0	4	4	4	4
New York	423	388	386	368	372
North Carolina	0	8	8	8	8
North Dakota	NA	NA	NA	5	5
Ohio	240	248	251	264	269
Oklahoma	60	79	64	64	64
Oregon	7	7	0	0	0
Pennsylvania	463	436	470	465	475
South Carolina	0	4	4	4	4
Tennessee	0	0	14	14	14
Texas	62	71	52	54	70
Virginia	12	19	28	28	32
Washington	0	0	0	5	5
West Virginia	47	71	76	76	65
Wisconsin	0	23	23	28	28
Wyoming	0	4	4	4	4
Total	2473	2743	2815	2808	2839

* Data shown represent the number of positions approved by the executive committee of the American Osteopathic Association (AOA) Council on Postdoctoral Training and the Program and Trainee Review Committee for the academic year indicated. Osteopathic medical internship positions are not currently approved in the District of Columbia or in the following nine states: Hawaii, Idaho, Maryland, Montana, Nebraska, Rhode Island, South Dakota, Utah, and Vermont.

Abbreviation: NA, not applicable.
Source: *Training Programs by State: Year-End Reports*, Division of Postdoctoral Training, American Osteopathic Association, Chicago, Ill.

Academic Year: 2006-2007

■ **States With More Approved Osteopathic Medical Internships**

- Florida (+33)
- Texas (+16)
- Michigan (+12)
- Pennsylvania (+10)
- Illinois (+5)
- Ohio (+5)
- New York (+4)
- Virginia (+4)
- Georgia (+3)
- Missouri (+2)

■ **States With Fewer Approved Osteopathic Medical Internships**

- Arizona (-13)
- Kansas (-12)
- West Virginia (-11)
- California (-9)
- Alabama (-8)
- Minnesota (-6)
- Arkansas (-4)

Figure 2. American Osteopathic Association's Intern/Resident Registration Program. When compared with data reported for the 2005-2006 academic year, the number of approved osteopathic medical internships in the 2006-2007 academic year increased in 10 states but decreased in 7 states, for an overall net gain of 31 AOA-approved internship positions.

Table 5
No. of AOA–Approved Residency Programs and Residents Filling Available Positions
as Reported by Academic Year and Specialty, 2004-2007

Specialty	2004–2005			2005–2006			2006–2007		
	Programs	Positions	Residents	Programs	Positions	Residents	Programs	Positions	Residents
■ Anesthesiology	11	70	50	12	73	57	11	73	64
□ Anesthesiology and pain management	2	3	0	2	3	1	2	30	0
■ Dermatology	18	95	56	19	106	66	19	108	83
■ Diagnostic radiology	13	109	74	14	129	100	14	130	105
□ Radiation oncology	0	0	0	0	0	0	0	0	0
□ Radiology (Vascular interventional)	1	1	1	1	1	0	1	1	0
■ Emergency medicine†	39	640	365	39	692	401	42	728	472
□ Emergency medicine and internal medicine	13	109	64	12	113	73	12	133	73
■ Family practice‡	147	1632	557	164	1726	507	168	1743	629
□ Family practice and emergency medicine	4	24	12	5	36	14	5	48	21
■ Geriatrics§	5	20	4	8	35	4	8	35	4
■ Internal medicine	63	735	237	74	853	237	79	973	286
□ Cardiac electrophysiology¶	NA	NA	NA	NA	NA	NA	1	3	0
□ Cardiology	15	86	44	18	108	47	18	113	69
□ Cardiology (Interventional)	3	5	1	5	12	0	6	15	4
□ Critical care medicine#	3	6	1	4	10	3	5	13	5
□ Endocrinology	0	0	0	2	4	1	2	7	3
□ Gastroenterology	7	24	15	7	24	15	8	28	17
□ Hematology and oncology	1	2	1	2	5	1	2	5	1
□ Infectious diseases	2	8	1	2	8	2	2	8	2
□ Nephrology	3	9	4	6	18	7	6	18	8
□ Oncology	1	3	0	1	3	0	2	6	0
□ Pulmonary (Critical care)	3	12	7	5	17	6	5	17	8
□ Pulmonary medicine	1	2	0	2	5	0	3	7	0
□ Rheumatology	3	6	0	3	6	2	3	8	5
■ Neurology	6	39	25	6	39	20	6	39	20
■ Neuromusculoskeletal medicine and osteopathic manual medicine**	14	62	24	21	85	16	20	72	23

(continued)

* Data shown for residency programs, positions, and residents is reported by the residency programs to the AOA's Division of Postdoctoral Training through the AOA's Trainee Information, Verification, and Registration Audit system. Although Match data does not change in a given year, program data does change because the AOA Council on Osteopathic Postdoctoral Training's Program and Trainee Review Committee, which has the sole authority to approve osteopathic medical residency programs and positions, meets quarterly and newly approved residency programs and positions are added to the AOA database at that time. Therefore, current data for the 2006-2007 academic year are to be considered incomplete and will be finalized in the JAOA's 2009 Medical Education issue. Changes made to the data reported for the 2005-2006 academic year follow: (1) The number of AOA-approved residency programs for *neuromusculoskeletal medicine and osteopathic manual medicine* was originally reported as 22, but has been updated to 21. (2) Similarly, the number of AOA-approved residency program positions for *neuromusculoskeletal medicine and osteopathic manual medicine* was originally reported as 88, but has been updated to 85. (3) Consequently, the total number of AOA-approved residency programs for the 2005-2006 academic year was originally reported as 649, but has been updated to 648. (4) The total number of residency positions for the 2005-2006 academic year was originally reported as 5769, but has been updated to 5766.

† *Emergency medicine* includes *emergency medical services*.

‡ *Family practice* includes *family practice and osteopathic manipulative medicine* as well as *family practice and osteopathic manipulative treatment*.

§ *Geriatrics* includes *geriatrics and family practice* as well as *geriatrics and internal medicine*.

|| Data is also available for interns and residents in their first year on the following specialty tracks: internal medicine (2004-2005, 110; 2005-2006, 106; and 2006-2007, 166), obstetrics and gynecology (2004-2005, 33; 2005-2006, 42; and 2006-2007, 46), otolaryngology and facial plastic surgery (2004-2005, 14; 2005-2006, 19; and 2006-2007, 16), and pediatrics (2004-2005, 34; 2005-2006, 35; and 2006-2007, 46). These numbers are exclusive of residency number. The total number of tracked internships for each academic year noted is as follows: 2004-2005, 191; 2005-2006, 202; and 2006-2007, 274.

¶ Residency programs were approved by the AOA for cardiac electrophysiology in the 2006-2007 academic year.

Critical care medicine includes *critical care (surgery)*.

** *Neuromusculoskeletal medicine and osteopathic manual medicine* includes *neuromusculoskeletal medicine +1*.

†† *Obstetrics and gynecology* includes *gynecological oncology*.

‡‡ Residency programs were approved by the AOA for hand surgery, orthopedic spine surgery, and forensic pathology in the 2005-2006 academic year.

§§ *Otolaryngology and facial plastic surgery* includes *otolaryngology and otolaryngologic allergy*.

||| *Sports medicine* includes *sports medicine and family practice*.

¶¶ *Thoracic and cardiovascular surgery* includes *cardiothoracic surgery*.

Abbreviations: AOA, American Osteopathic Association; NA, not applicable.

Sources: AOA Intern/Resident Contracts received by the division of postdoctoral training for the academic years shown; and AOA's Trainee Information, Verification, and Registration Audit system, academic year 2006-2007. Data for the 2004-2005 and 2005-2006 academic years have been reported previously in *JAOA—The Journal of the American Osteopathic Association*.^{1,4} As noted in the first footnote, current data for the 2006-2007 academic year are to be considered incomplete.

Table 5 (continued)
No. of AOA–Approved Residency Programs and Residents Filling Available Positions
as Reported by Academic Year and Specialty, 2004-2007

Specialty	2004–2005			2005–2006			2006–2007		
	Programs	Positions	Residents	Programs	Positions	Residents	Programs	Positions	Residents
■ Obstetrics and gynecology// ††	31	320	159	35	336	161	32	348	153
□ Maternal and fetal medicine	1	3	0	2	6	1	3	9	1
■ Ophthalmology	9	42	30	11	48	36	12	57	38
■ Orthopedic surgery	28	316	235	29	341	252	30	350	291
□ Hand surgery††	NA	NA	NA	1	3	0	1	3	0
□ Orthopedic spine surgery††	NA	NA	NA	1	2	0	1	2	0
■ Otolaryngology and facial plastic surgery// §§	19	92	68	19	97	72	19	102	77
■ Pathology	0	0	0	0	0	0	1	1	0
□ Forensic pathology††	NA	NA	NA	1	1	0	1	1	0
■ Pediatrics//	15	162	59	14	154	63	14	154	65
□ Pediatric emergency medicine	1	4	1	0	0	0	0	0	0
□ Pediatric radiology	1	3	0	1	3	0	1	3	0
□ Pediatrics (Internal medicine)	2	10	5	1	6	6	1	6	6
■ Physical medicine and rehabilitation medicine	1	9	6	3	28	14	3	28	16
■ Preventive medicine and public health	1	3	1	1	3	0	1	3	1
□ Preventive medicine (Occupational and environmental)	1	3	0	1	3	0	0	0	0
■ Proctology	1	2	0	1	2	1	1	2	1
■ Psychiatry	4	42	19	5	48	24	6	51	36
□ Child psychiatry	1	2	0	1	2	0	1	2	1
■ Sports medicine// //	13	44	5	14	48	10	13	42	13
■ Surgery (General)	36	329	217	40	368	234	39	387	287
□ General vascular surgery	7	18	1	9	21	5	9	20	4
□ Neurological surgery	9	52	38	11	66	39	12	86	49
□ Plastic and reconstructive surgery	2	9	8	4	14	9	5	18	13
□ Thoracic and cardiovascular surgery¶¶¶	3	13	0	2	11	0	2	11	1
□ Urological surgery	5	37	27	7	44	28	7	45	34
Total//	569	5217	2422	648	5766	2535	665	6045	2989

* Data shown for residency programs, positions, and residents is reported by the residency programs to the AOA's Division of Postdoctoral Training through the AOA's Trainee Information, Verification, and Registration Audit system. Although Match data does not change in a given year, program data does change because the AOA Council on Osteopathic Postdoctoral Training's Program and Trainee Review Committee, which has the sole authority to approve osteopathic medical residency programs and positions, meets quarterly and newly approved residency programs and positions are added to the AOA database at that time. Therefore, current data for the 2006-2007 academic year are to be considered incomplete and will be finalized in the JAOA's 2009 Medical Education issue. Changes made to the data reported for the 2005-2006 academic year follow: (1) The number of AOA-approved residency programs for *neuromusculoskeletal medicine and osteopathic manual medicine* was originally reported as 22, but has been updated to 21. (2) Similarly, the number of AOA-approved residency program positions for *neuromusculoskeletal medicine and osteopathic manual medicine* was originally reported as 88, but has been updated to 85. (3) Consequently, the total number of AOA-approved residency programs for the 2005-2006 academic year was originally reported as 649, but has been updated to 648. (4) The total number of residency positions for the 2005-2006 academic year was originally reported as 5769, but has been updated to 5766.

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