

AACP SPECIAL REPORT

The Pharmacy Student Population: Applications Received 2015-16, Degrees Conferred 2015-16, Fall 2016 Enrollments

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INTRODUCTION

This report presents data that describe the 2015-16 pharmacy application pool, degrees conferred in 2015-16, and fall 2016 pharmacy program enrollments. Data for this report were requested from 138 U.S. colleges and schools of pharmacy recognized by the Accreditation Council for Pharmacy Education (ACPE) using five separate survey instruments.

There were previously two professional education programs at U.S. colleges and schools of pharmacy: one leading to a baccalaureate in pharmacy, and the other leading to the doctor of pharmacy (Pharm.D.) degree. However, June 30, 2005 marked the official expiration of the ACPE standards to the baccalaureate in pharmacy (B.S. Pharmacy) degree programs in accordance with the transition to the doctor of pharmacy (Pharm.D.) degree as the sole professional degree program in the U.S. Some colleges and schools of pharmacy conferred degrees in the B.S. Pharmacy program until 2004-05. For the purpose of this report, students in doctor of pharmacy programs are categorized under Pharm.D.1 when the program leads to a doctor of pharmacy degree conferred as the first professional degree. Students who have already received a baccalaureate in pharmacy and are enrolled in a doctor of pharmacy degree program are categorized under Pharm.D.2.

The following definitions refer to the race/ethnicity groups as used in this report. White refers to U.S. citizens or permanent residents having origins in any of the original peoples of Europe, the Middle East, or North Africa. Black or African American refers to U.S. citizens or permanent residents having origins in any of the black racial groups of Africa. Hispanic or Latino refers to U.S. citizens or permanent residents of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. Asian refers to U.S. citizens or permanent residents having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. Native Hawaiian or Other Pacific Islander refers to U.S. citizens or permanent

residents having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. Prior to 2011, these students were included in the Asian category. American Indian or Alaska Native refers to U.S. citizens or permanent residents having origins in any of the original peoples of North and South America (including Central America) who maintains cultural identification through tribal affiliation or community attachment. Two or More Races refers to U.S. citizens or permanent residents who are not Hispanic or Latino and identify themselves by more than one race. Unknown refers to U.S. citizens or permanent residents whose race and ethnicity are not known. Prior to 2011, this category was labeled Other/Unknown and students that were of two or more races were included in this category. Finally, International/Foreign refers to citizens of a foreign country/permanent residents of a country other than the U.S.

2015-16 APPLICATION POOL

The 2015-16 Application Pool Survey was conducted online in October 2016 with an announcement and request for participation sent to the survey coordinator at each of the 138 colleges and schools of pharmacy in the U.S. recognized by ACPE. After follow-up correspondence, 137 colleges and schools (99.3%) submitted the requested information. Included in the application pool are applicants who applied for admission and submitted all required application materials as defined by the Pharmacy College Application Service (PharmCAS) between September 2015 and August 2016 for the entering class of fall 2016. Numbers reported represent the number of applications, not applicants, and may represent multiple applications submitted by individual applicants.

During the period September 2015 through August 2016 the reporting institutions received 78,514 applications for admission. In 2015-16, females submitted 60.4% of the applications to pharmacy colleges and schools; males submitted 38.6%; gender unknown/not reported submitted 1.0%. White Americans submitted 36.1% of the applications, Asian Americans submitted 32.1% of the applications, and underrepresented minorities submitted 19.0% of the applications (Black or African

Table 1. Distribution of 2015-16 Applications by Gender and Race/Ethnicity of Applicant^a

| Race/Ethnicity | Male | Female | Gender Not Specified | Total (%) |
|--|--------|--------|----------------------|---------------|
| White ^b | 11,247 | 17,044 | 65 | 28,356 (36.1) |
| Black or African American ^b | 3,654 | 5,916 | 8 | 9,578 (12.2) |
| Hispanic or Latino ^b | 2,010 | 3,106 | 19 | 5,135 (6.5) |
| Asian ^b | 9,577 | 15,547 | 92 | 25,516 (32.1) |
| Native Hawaiian or Other Pacific Islander ^b | 30 | 16 | 0 | 46 (0.1) |
| American Indian or Alaska Native ^b | 47 | 81 | 0 | 128 (0.2) |
| Two or more races ^b | 979 | 1,455 | 5 | 2,439 (3.1) |
| Unknown ^b | 1,537 | 2,217 | 583 | 4,337 (5.5) |
| International/Foreign ^c | 1,192 | 2,055 | 32 | 3,279 (4.2) |
| Total | 30,273 | 47,437 | 804 | 78,514 |

^aRepresents data, some incomplete, submitted by 137 schools

^bU.S. citizen or permanent resident

^cCitizens of a foreign country/permanent residents of a country other than the U.S

American, 12.2%; Hispanic or Latino, 6.5%; Native Hawaiian or Other Pacific Islander, 0.1%; American Indian or Alaska Native, 0.2%). Applications submitted from students that identified as two or more races totaled 3.1% and 4.2% of the applications were submitted by foreign, non-permanent residents [Table 1]. For the twelfth consecutive year, colleges and schools of pharmacy received more applications from out-of-state residents (55.0%) compared to 45.0% from in-state residents. The higher percentage of out-of-state applicants can be attributed to the ease of applying to colleges and schools of pharmacy in different states through PharmCAS.

Over 77% (77.2%) of the applications to colleges and schools of pharmacy were submitted by individuals who had 3 or more years of postsecondary experience (3 or more years of college/no degree, 37.2%; baccalaureate, 37.6%; master's, 2.1%; doctoral degree, 0.3%), [Table 2].

2015-16 DEGREES CONFERRED

The 2015-16 Undergraduate and Professional Pharmacy Degrees Conferred and Graduate Pharmacy Degrees Conferred surveys were conducted online in October

2016, with an announcement and request for participation sent to the survey coordinator at each of the 138 colleges and schools of pharmacy in the U.S. recognized by ACPE. Submission of the data was requested by December 2017. After follow-up correspondence, 137 colleges and schools (99.3%) submitted the Undergraduate and Professional Degrees Conferred Survey and the Graduate Degrees Conferred Survey.

Professional Degrees Conferred

Numbers of degrees conferred by U.S. colleges and schools of pharmacy from 1965 to 2016 are presented in Table 3.

First Professional Degrees Conferred

In 2015-16, 128 colleges and schools of pharmacy reported conferring the doctor of pharmacy as a first professional degree (Pharm.D.1). Graduating Pharm.D.1 class sizes ranged from 32 students to 334 students (median, 98 students). Nine of the 137 colleges and schools did not confer degrees in 2015-16. These schools were new programs whose students had not yet progressed

Table 2. Distribution of 2015-16 Applications to First Professional Degree Programs by Gender and Previous Postsecondary Experience of Applicant^a

| Postsecondary Experience | Male | Female | Gender Not Specified | Total (%) |
|--------------------------------------|--------|--------|----------------------|---------------|
| 0 Years of College | 2,929 | 4,873 | 2 | 7,804 (9.9) |
| 1-2 Years of College/No Degree | 1,473 | 2,587 | 41 | 4,101 (5.2) |
| Associate's Degree | 2,501 | 3,476 | 55 | 6,032 (7.7) |
| 3 or More Years of College/No Degree | 11,140 | 17,839 | 250 | 29,229 (37.2) |
| Baccalaureate Degree | 11,499 | 17,594 | 396 | 29,489 (37.6) |
| Master's Degree | 655 | 960 | 46 | 1,661 (2.1) |
| Doctoral Degree | 80 | 116 | 1 | 197 (0.3) |

^aRepresents data, some incomplete, submitted by 137 schools

American Journal of Pharmaceutical Education 2017; 81 (7) Article S8.

Table 3. Number of Pharmacy Degrees Conferred 1965-2016 by Degree and Gender

| Year | B.S. Pharmacy ^a | | | Pharm.D.1 ^b | | | First Professional ^c | | | Pharm.D.2 ^d | | | M.S. | | | Ph.D. | | |
|------|----------------------------|-------|-------|------------------------|-------|--------|---------------------------------|-------|--------|------------------------|-----|-------|------|-----|-------|-------|-----|-----|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| 1965 | 2,723 | 454 | 3,177 | 162 | 21 | 183 | 2,885 | 475 | 3,360 | | | | 150 | 26 | 176 | 105 | 3 | 108 |
| 1966 | 2,970 | 500 | 3,470 | 161 | 28 | 189 | 3,131 | 528 | 3,659 | | | | 152 | 38 | 190 | 108 | 15 | 123 |
| 1967 | 3,078 | 493 | 3,571 | 136 | 37 | 173 | 3,214 | 530 | 3,744 | | | | 235 | 32 | 267 | 118 | 8 | 126 |
| 1968 | 3,194 | 572 | 3,766 | 183 | 39 | 222 | 3,377 | 611 | 3,988 | | | | 219 | 44 | 263 | 124 | 10 | 134 |
| 1969 | 3,384 | 695 | 4,079 | 178 | 31 | 209 | 3,562 | 726 | 4,288 | | | | 235 | 42 | 277 | 136 | 9 | 145 |
| 1970 | 3,664 | 853 | 4,517 | 192 | 49 | 241 | 3,856 | 902 | 4,758 | | | | 236 | 54 | 290 | 131 | 10 | 141 |
| 1971 | 3,589 | 935 | 4,524 | 160 | 63 | 223 | 3,749 | 998 | 4,747 | | | | 219 | 56 | 275 | 169 | 8 | 177 |
| 1972 | 3,498 | 1,072 | 4,570 | 215 | 73 | 288 | 3,713 | 1,145 | 4,858 | | | | 205 | 56 | 261 | 155 | 13 | 168 |
| 1973 | 3,674 | 1,259 | 4,933 | 184 | 67 | 251 | 3,858 | 1,326 | 5,184 | 99 | 18 | 117 | 273 | 53 | 326 | 172 | 15 | 187 |
| 1974 | 4,104 | 1,559 | 5,663 | 205 | 89 | 294 | 4,309 | 1,648 | 5,957 | 117 | 23 | 140 | 250 | 70 | 320 | 165 | 19 | 184 |
| 1975 | 4,607 | 1,792 | 6,399 | 218 | 95 | 313 | 4,825 | 1,887 | 6,712 | 110 | 26 | 136 | 250 | 89 | 339 | 165 | 24 | 189 |
| 1976 | 4,940 | 2,165 | 7,105 | 250 | 109 | 359 | 5,190 | 2,274 | 7,464 | 88 | 38 | 126 | 301 | 92 | 393 | 163 | 26 | 189 |
| 1977 | 5,108 | 2,541 | 7,649 | 255 | 107 | 362 | 5,363 | 2,648 | 8,011 | 147 | 42 | 189 | 309 | 90 | 399 | 147 | 19 | 166 |
| 1978 | 4,715 | 2,715 | 7,430 | 246 | 109 | 355 | 4,961 | 2,824 | 7,785 | 132 | 65 | 197 | 305 | 117 | 422 | 158 | 20 | 178 |
| 1979 | 4,260 | 2,835 | 7,095 | 278 | 183 | 461 | 4,538 | 3,018 | 7,556 | 139 | 51 | 190 | 301 | 134 | 435 | 125 | 28 | 153 |
| 1980 | 4,154 | 2,831 | 6,985 | 267 | 180 | 447 | 4,421 | 3,011 | 7,432 | 120 | 60 | 180 | 315 | 150 | 465 | 155 | 34 | 189 |
| 1981 | 3,753 | 3,116 | 6,869 | 265 | 189 | 454 | 4,018 | 3,305 | 7,323 | 109 | 101 | 210 | 271 | 163 | 434 | 152 | 28 | 180 |
| 1982 | 3,417 | 3,031 | 6,448 | 217 | 194 | 411 | 3,634 | 3,225 | 6,859 | 119 | 88 | 207 | 293 | 165 | 458 | 146 | 36 | 182 |
| 1983 | 2,994 | 2,925 | 5,919 | 240 | 215 | 455 | 3,234 | 3,140 | 6,374 | 136 | 135 | 271 | 277 | 149 | 426 | 154 | 54 | 208 |
| 1984 | 2,826 | 2,720 | 5,546 | 188 | 229 | 417 | 3,014 | 2,949 | 5,963 | 169 | 162 | 331 | 253 | 141 | 394 | 174 | 53 | 227 |
| 1985 | 2,362 | 2,785 | 5,147 | 281 | 307 | 588 | 2,643 | 3,092 | 5,735 | 121 | 103 | 224 | 210 | 128 | 338 | 175 | 57 | 232 |
| 1986 | 2,370 | 2,820 | 5,190 | 278 | 332 | 610 | 2,648 | 3,152 | 5,800 | 97 | 113 | 210 | 245 | 170 | 415 | 192 | 68 | 260 |
| 1987 | 2,235 | 2,929 | 5,164 | 291 | 399 | 690 | 2,526 | 3,328 | 5,854 | 86 | 126 | 212 | 197 | 151 | 348 | 203 | 80 | 283 |
| 1988 | 2,245 | 3,126 | 5,371 | 322 | 491 | 813 | 2,567 | 3,617 | 6,184 | 74 | 85 | 159 | 194 | 159 | 353 | 188 | 75 | 263 |
| 1989 | 2,313 | 3,408 | 5,721 | 314 | 525 | 839 | 2,627 | 3,933 | 6,560 | 99 | 123 | 222 | 226 | 165 | 391 | 175 | 112 | 287 |
| 1990 | 2,393 | 3,617 | 6,010 | 388 | 558 | 946 | 2,781 | 4,175 | 6,956 | 118 | 184 | 302 | 202 | 183 | 385 | 181 | 92 | 273 |
| 1991 | 2,268 | 3,659 | 5,927 | 436 | 759 | 1,195 | 2,704 | 4,418 | 7,122 | 106 | 165 | 271 | 189 | 175 | 364 | 201 | 112 | 313 |
| 1992 | 2,261 | 3,636 | 5,897 | 436 | 780 | 1,216 | 2,697 | 4,416 | 7,113 | 124 | 162 | 286 | 148 | 134 | 282 | 195 | 122 | 317 |
| 1993 | 2,244 | 3,787 | 6,031 | 460 | 889 | 1,349 | 2,704 | 4,676 | 7,380 | 141 | 255 | 396 | 148 | 153 | 301 | 223 | 125 | 348 |
| 1994 | 2,274 | 3,871 | 6,145 | 435 | 924 | 1,359 | 2,709 | 4,795 | 7,504 | 208 | 367 | 575 | 182 | 173 | 355 | 198 | 122 | 320 |
| 1995 | 2,291 | 3,927 | 6,218 | 553 | 1,066 | 1,619 | 2,844 | 4,993 | 7,837 | 270 | 434 | 704 | 187 | 205 | 392 | 218 | 132 | 350 |
| 1996 | 2,311 | 3,857 | 6,168 | 583 | 1,252 | 1,835 | 2,894 | 5,109 | 8,003 | 264 | 468 | 732 | 217 | 205 | 422 | 186 | 118 | 304 |
| 1997 | 2,212 | 3,556 | 5,768 | 691 | 1,313 | 2,004 | 2,903 | 4,869 | 7,772 | 321 | 538 | 859 | 191 | 209 | 400 | 218 | 140 | 358 |
| 1998 | 1,818 | 2,950 | 4,768 | 830 | 1,802 | 2,632 | 2,648 | 4,752 | 7,400 | 351 | 663 | 1,014 | 197 | 224 | 421 | 238 | 173 | 411 |
| 1999 | 1,528 | 2,348 | 3,876 | 1,081 | 2,184 | 3,265 | 2,609 | 4,532 | 7,141 | 315 | 598 | 913 | 172 | 212 | 384 | 221 | 138 | 359 |
| 2000 | 1,115 | 1,841 | 2,956 | 1,432 | 2,872 | 4,304 | 2,547 | 4,713 | 7,260 | 469 | 800 | 1,269 | 154 | 200 | 354 | 174 | 149 | 323 |
| 2001 | 754 | 1,160 | 1,914 | 1,730 | 3,356 | 5,086 | 2,484 | 4,516 | 7,000 | 367 | 612 | 979 | 182 | 279 | 461 | 211 | 164 | 375 |
| 2002 | 540 | 875 | 1,415 | 2,055 | 4,103 | 6,158 | 2,595 | 4,978 | 7,573 | 276 | 504 | 780 | 178 | 265 | 443 | 216 | 160 | 376 |
| 2003 | 303 | 536 | 839 | 2,333 | 4,316 | 6,649 | 2,636 | 4,852 | 7,488 | 338 | 557 | 895 | 199 | 273 | 472 | 210 | 174 | 384 |
| 2004 | 153 | 235 | 388 | 2,568 | 5,202 | 7,770 | 2,721 | 5,437 | 8,158 | 277 | 479 | 756 | 274 | 377 | 651 | 176 | 159 | 335 |
| 2005 | 16 | 10 | 26 | 2,618 | 5,624 | 8,242 | 2,634 | 5,634 | 8,268 | 241 | 427 | 668 | 233 | 393 | 626 | 215 | 214 | 429 |
| 2006 | 0 | 0 | 0 | 2,875 | 6,165 | 9,040 | 2,875 | 6,165 | 9,040 | 202 | 313 | 515 | 241 | 403 | 644 | 252 | 190 | 442 |
| 2007 | 0 | 0 | 0 | 3,171 | 6,641 | 9,812 | 3,171 | 6,641 | 9,812 | 97 | 373 | 470 | 236 | 368 | 604 | 220 | 192 | 412 |
| 2008 | 0 | 0 | 0 | 3,575 | 6,925 | 10,500 | 3,575 | 6,925 | 10,500 | 225 | 402 | 627 | 275 | 457 | 732 | 262 | 206 | 468 |
| 2009 | 0 | 0 | 0 | 3,912 | 7,076 | 10,988 | 3,912 | 7,076 | 10,988 | 179 | 349 | 528 | 371 | 396 | 767 | 228 | 230 | 458 |
| 2010 | 0 | 0 | 0 | 4,287 | 7,200 | 11,487 | 4,287 | 7,200 | 11,487 | 191 | 336 | 527 | 343 | 430 | 773 | 243 | 207 | 450 |
| 2011 | 0 | 0 | 0 | 4,553 | 7,378 | 11,931 | 4,553 | 7,378 | 11,931 | 167 | 248 | 415 | 352 | 470 | 822 | 250 | 221 | 471 |
| 2012 | 0 | 0 | 0 | 4,937 | 7,782 | 12,719 | 4,937 | 7,782 | 12,719 | 163 | 281 | 444 | 298 | 383 | 681 | 275 | 222 | 497 |
| 2013 | 0 | 0 | 0 | 5,063 | 8,144 | 13,207 | 5,063 | 8,144 | 13,207 | 132 | 212 | 344 | 265 | 390 | 655 | 293 | 296 | 589 |
| 2014 | 0 | 0 | 0 | 5,483 | 8,355 | 13,838 | 5,483 | 8,355 | 13,838 | 110 | 229 | 339 | 340 | 435 | 775 | 298 | 267 | 565 |
| 2015 | 0 | 0 | 0 | 5,369 | 8,625 | 13,994 | 5,369 | 8,625 | 13,994 | 88 | 185 | 273 | 326 | 394 | 720 | 312 | 249 | 561 |
| 2016 | 0 | 0 | 0 | 5,635 | 8,921 | 14,556 | 5,635 | 8,291 | 14,556 | 120 | 206 | 326 | 411 | 612 | 1,023 | 297 | 250 | 547 |

through the entire curriculum (California Health Sciences, Chapman, Keck Graduate Institute, Marshall B. Ketchum, West Coast, Larkin, High Point, North Texas, and Texas at Tyler).

In 2015-16 there were 14,556 first professional degrees conferred by colleges and schools compared to 13,994 in 2014-15 [Table 4]. The total number of first professional degrees conferred in 2015-16 represented a 4.0% increase from the total number of first professional degrees conferred in 2014-15 [Table 5].

In 1979-80, men received 59.5% of the first professional degrees conferred by colleges and schools and women received 40.5%. Over the past 35 years, these percentages have shifted dramatically and, in 2015-16, men received 38.7% of the first professional degrees conferred and 61.3% of these degrees were received by women. Women received the highest percentage of degrees conferred in 2005-06 (68.2%) [Table 6]. White Americans received 53.2% of first professional degrees conferred in 2015-16. Asian Americans received 24.6% of the first professional degrees. Underrepresented minorities received 12.2% of the first professional degrees conferred in 2015-16 (Black or African American, 7.3%; Hispanic or Latino, 4.4%; Native Hawaiian or Other Pacific Islander, 0.2%; American Indian or Alaska Native, 0.3 %). The percentage of first professional degree recipients who were of two or more races was 2.2% and the percentage of recipients who were foreign, nonpermanent residents of the U.S. was 2.7% [Table 7].

Doctor of Pharmacy Degrees Conferred to Post Baccalaureate Students

Eight colleges and schools conferred the Pharm.D. degree to post baccalaureate students in 2015-16. The number of graduates per institution ranged from 1 to 110 students (median, 30 students). The number of doctor of pharmacy degrees conferred as postbaccalaureate degrees (Pharm.D.2) increased by 19.4% to 326 in 2015-16 from 273 in 2014-15 [Table 5]. More women than men received Pharm.D.2 degrees in 2014-15 (women, 63.2%; men, 36.8%) [Table 6].

White Americans received 28.5% of Pharm.D.2 degrees conferred in 2015-16. Asian Americans received 19.3% of the Pharm.D.2 degrees conferred. Underrepresented minorities received 21.5% of the Pharm.D.2 degrees conferred (Black or African American, 17.8%; Hispanic or Latino, 2.5%; Native Hawaiian or Other Pacific Islander, 0.9%; American Indian or Alaska Native, 0.3%). Students of two or more races received 0.0 of Pharm.D.2 degrees conferred in 2015-16. The percentage of Pharm.D.2 degree recipients who were foreign,

Table 4. Baccalaureate and Doctor of Pharmacy (Pharm.D.1) Degrees as Percentages of Total First Professional Degrees Conferred 1981-2016

| Year | B.S. Pharmacy ^a | Pharm.D.1 ^b | First Professional ^c |
|------|----------------------------|------------------------|---------------------------------|
| | n (%) | n (%) | n |
| 1981 | 6,869 (93.8) | 454 (6.2) | 7,323 |
| 1982 | 6,448 (94.0) | 411 (6.0) | 6,859 |
| 1983 | 5,919 (92.9) | 455 (7.1) | 6,374 |
| 1984 | 5,546 (93.0) | 417 (7.0) | 5,963 |
| 1985 | 5,147 (89.7) | 588 (10.3) | 5,735 |
| 1986 | 5,190 (89.5) | 610 (10.5) | 5,800 |
| 1987 | 5,164 (88.2) | 690 (11.8) | 5,854 |
| 1988 | 5,371 (86.9) | 813 (13.1) | 6,184 |
| 1989 | 5,721 (87.3) | 839 (12.7) | 6,560 |
| 1990 | 6,010 (86.4) | 946 (13.6) | 6,956 |
| 1991 | 5,927 (83.2) | 1,195 (16.8) | 7,122 |
| 1992 | 5,897 (82.9) | 1,216 (17.1) | 7,113 |
| 1993 | 6,031 (81.7) | 1,349 (18.3) | 7,380 |
| 1994 | 6,145 (81.9) | 1,359 (18.1) | 7,504 |
| 1995 | 6,218 (79.3) | 1,619 (20.7) | 7,837 |
| 1996 | 6,168 (77.1) | 1,835 (22.9) | 8,003 |
| 1997 | 5,768 (74.2) | 2,004 (25.8) | 7,772 |
| 1998 | 4,768 (64.4) | 2,632 (35.6) | 7,400 |
| 1999 | 3,876 (54.3) | 3,265 (45.7) | 7,141 |
| 2000 | 2,956 (40.7) | 4,304 (59.3) | 7,260 |
| 2001 | 1,914 (27.3) | 5,086 (72.7) | 7,000 |
| 2002 | 1,415 (18.7) | 6,158 (81.3) | 7,573 |
| 2003 | 839 (11.2) | 6,649 (88.8) | 7,488 |
| 2004 | 388 (4.8) | 7,770 (95.2) | 8,158 |
| 2005 | 26 (0.3) | 8,242 (99.7) | 8,268 |
| 2006 | 0 (0.0) | 9,040 (100.0) | 9,040 |
| 2007 | 0 (0.0) | 9,812 (100.0) | 9,812 |
| 2008 | 0 (0.0) | 10,500 (100.0) | 10,500 |
| 2009 | 0 (0.0) | 10,988 (100.0) | 10,988 |
| 2010 | 0 (0.0) | 11,487 (100.0) | 11,487 |
| 2011 | 0 (0.0) | 11,931 (100.0) | 11,931 |
| 2012 | 0 (0.0) | 12,719 (100.0) | 12,719 |
| 2013 | 0 (0.0) | 13,207 (100.0) | 13,207 |
| 2014 | 0 (0.0) | 13,838 (100.0) | 13,838 |
| 2015 | 0 (0.0) | 13,994 (100.0) | 13,994 |
| 2016 | 0 (0.0) | 14,556 (100.0) | 14,556 |

^aIncludes B.Pharm. degree

^bPharm.D.1 refers to the doctor of pharmacy degree awarded as the first professional degree

^cIncludes B.S. Pharmacy, B.Pharm., and Pharm.D.1

nonpermanent residents of the U.S. was 15.6%, down from 17.9% in 2014-15 [Table 8].

Graduate Degrees Conferred

The number of graduate degrees (M.S. and Ph.D.) conferred has shown annual fluctuations over the 50 years data have been consistently gathered and reported [Table 3]. The number of M.S. degrees conferred increased to 1,023 in 2015-16 from 720 in 2014-15, a 42.1% increase. The number

Table 5. Annual Percentage Change in Number of Pharmacy Degrees Conferred 1981-2016 Over Previous Year

| Year | First Professional ^a No. (% Change) | Pharm.D.2 ^b No. (% Change) | M.S. No. (% Change) | Ph.D. No. (% Change) |
|------|---|--|------------------------|-------------------------|
| 1981 | 7,323 (-1.5) | 210 (+16.7) | 434 (-6.7) | 180 (-4.8) |
| 1982 | 6,859 (-6.3) | 207 (-1.4) | 458 (+5.5) | 182 (+1.1) |
| 1983 | 6,374 (-7.1) | 271 (+30.9) | 426 (-7.0) | 208 (+14.3) |
| 1984 | 5,963 (-6.4) | 331 (+22.2) | 394 (-7.5) | 227 (+9.1) |
| 1985 | 5,735 (-3.8) | 224 (-32.3) | 338 (-14.2) | 232 (+2.2) |
| 1986 | 5,800 (+1.1) | 210 (-6.3) | 415 (+22.8) | 260 (+12.1) |
| 1987 | 5,854 (+0.9) | 212 (+1.0) | 348 (-16.1) | 283 (+8.8) |
| 1988 | 6,184 (+5.6) | 159 (-25.0) | 353 (+1.4) | 263 (-7.1) |
| 1989 | 6,560 (+6.0) | 222 (+39.6) | 391 (+10.8) | 287 (+9.1) |
| 1990 | 6,956 (+6.0) | 302 (+36.0) | 385 (-1.5) | 273 (-4.9) |
| 1991 | 7,122 (+2.4) | 271 (-10.3) | 364 (-5.5) | 313 (+14.7) |
| 1992 | 7,113 (-0.1) | 286 (+5.5) | 282 (-22.5) | 317 (+1.3) |
| 1993 | 7,380 (+3.8) | 396 (+38.5) | 301 (+6.7) | 348 (+9.8) |
| 1994 | 7,504 (+1.7) | 575 (+45.2) | 355 (+17.9) | 320 (-8.0) |
| 1995 | 7,837 (+4.4) | 704 (+22.4) | 392 (+10.4) | 350 (+9.4) |
| 1996 | 8,003 (+2.1) | 732 (+4.0) | 422 (+7.7) | 304 (-13.1) |
| 1997 | 7,772 (-2.9) | 859 (+17.3) | 400 (-5.2) | 358 (+17.8) |
| 1998 | 7,400 (-4.8) | 1,014 (+18.0) | 421 (+5.3) | 411 (+14.8) |
| 1999 | 7,141 (-3.5) | 913 (-10.0) | 384 (-8.8) | 359 (-12.7) |
| 2000 | 7,260 (+1.7) | 1,269 (+39.0) | 354 (-7.8) | 323 (-10.0) |
| 2001 | 7,000 (-3.6) | 979 (-22.9) | 461 (+30.2) | 375 (+16.1) |
| 2002 | 7,573 (+8.2) | 780 (-20.3) | 443 (-3.9) | 376 (+0) |
| 2003 | 7,488 (-1.1) | 895 (+14.7) | 472 (+6.5) | 384 (+2.1) |
| 2004 | 8,158 (+8.9) | 756 (-15.5) | 651 (+37.9) | 335 (-12.8) |
| 2005 | 8,268 (+1.3) | 668 (-11.6) | 626 (-3.8) | 429 (+28.1) |
| 2006 | 9,040 (+9.3) | 515 (-22.9) | 644 (+2.9) | 442 (+3.0) |
| 2007 | 9,812 (+8.5) | 470 (-8.7) | 604 (-6.2) | 412 (-6.8) |
| 2008 | 10,500 (+7.0) | 627 (+33.4) | 732 (+21.2) | 468 (+13.6) |
| 2009 | 10,988 (+4.6) | 528 (-15.8) | 767 (+4.8) | 458 (-2.1) |
| 2010 | 11,487 (+4.5) | 527 (-0.2) | 773 (+0.8) | 450 (-1.7) |
| 2011 | 11,931 (+3.9) | 415 (-21.3) | 822 (+6.3) | 471 (+4.7) |
| 2012 | 12,719 (+6.6) | 444 (+7.0) | 681 (-17.2) | 497 (+5.5) |
| 2013 | 13,207 (+3.8) | 344 (-22.5) | 655 (-3.8) | 589 (+18.5) |
| 2014 | 13,838 (+4.8) | 339 (-1.5) | 775 (+18.3) | 565 (-4.1) |
| 2015 | 13,994 (+1.1) | 273 (-19.5) | 720 (-7.1) | 561 (-0.7) |
| 2016 | 14,556 (+4.0) | 326 (+19.4) | 1,023 (+42.1) | 547 (-2.5) |

^aIncludes B.S. Pharmacy, B.Pharm., and Pharm.D.1 from 1981-2005. Includes only Pharm.D.1 beginning in 2006

^bPharm.D.2 refers to the doctor of pharmacy degree awarded as a postbaccalaureate degree

of Ph.D. degrees conferred decreased in 2015-16 to 547 from 561 in 2014-15 (2.5% decrease) [Table 5].

The highest percentage of M.S. degrees awarded in 2015-16 (27.0%) was in social and administrative sciences. The second highest percentage of M.S. degrees was in pharmaceuticals (24.8%); followed by medicinal chemistry (19.8%); pharmacy practice (12.9%); pharmacology (12.0%); and other disciplines (3.4%). The highest number of Ph.D. degrees awarded in 2015-16 was in the discipline of pharmaceuticals (36.7%). The second highest number was in pharmacology (22.5%); followed by medicinal chemistry (18.6%); social and administrative sciences

(10.4%); other disciplines (7.5%); and pharmacy practice (4.2%) [Table 9].

More women than men earned M.S. degrees (women, 59.8%; men, 40.2%); however, more men than women earned Ph.D. degrees (women, 45.7%; men, 54.3%) in 2015-16. There have only been two years (2012-13 and 2008-09) since AACP began collecting data that women received more Ph.D. degrees than men. The percentage of women receiving Ph.D. degrees increased from 44.4% in 2014-15 to 45.7% in 2015-16. Overall, the number of Ph.D. degrees received by women has grown substantially from 18.0% in 1979-80 [Table 6].

Table 6. Percentage of Pharmacy Degrees Conferred 1980-2016 by Gender

| Year | B.S. Pharmacy ^a | | Pharm.D.1 ^b | | First Professional ^c | | Pharm.D.2 ^d | | M.S. | | Ph.D. | |
|------|----------------------------|------|------------------------|------|---------------------------------|------|------------------------|------|------|------|-------|------|
| | M | F | M | F | M | F | M | F | M | F | M | F |
| 1980 | 59.5 | 40.5 | 59.7 | 40.3 | 59.5 | 40.5 | 66.7 | 33.3 | 67.7 | 32.3 | 82.0 | 18.0 |
| 1981 | 54.6 | 45.4 | 58.4 | 41.6 | 54.9 | 45.1 | 51.9 | 48.1 | 62.4 | 37.6 | 84.4 | 15.6 |
| 1982 | 53.0 | 47.0 | 52.8 | 47.2 | 53.0 | 47.0 | 57.5 | 42.5 | 64.0 | 36.0 | 80.2 | 19.8 |
| 1983 | 50.6 | 49.4 | 52.7 | 47.3 | 50.7 | 49.3 | 50.2 | 49.8 | 65.0 | 35.0 | 74.0 | 26.0 |
| 1984 | 51.0 | 49.0 | 45.1 | 54.9 | 50.5 | 49.5 | 51.1 | 48.9 | 64.2 | 35.8 | 76.7 | 23.3 |
| 1985 | 45.9 | 54.1 | 47.8 | 52.2 | 46.1 | 53.9 | 54.0 | 46.0 | 62.1 | 37.9 | 75.4 | 24.6 |
| 1986 | 45.7 | 54.3 | 45.6 | 54.4 | 45.7 | 54.3 | 46.2 | 53.8 | 59.0 | 41.0 | 73.8 | 26.2 |
| 1987 | 43.3 | 56.7 | 42.2 | 57.8 | 43.1 | 56.9 | 40.6 | 59.4 | 56.6 | 43.4 | 71.7 | 28.3 |
| 1988 | 41.8 | 58.2 | 39.6 | 60.4 | 41.5 | 58.5 | 46.5 | 53.5 | 55.0 | 45.0 | 71.5 | 28.5 |
| 1989 | 40.4 | 59.6 | 37.4 | 62.6 | 40.0 | 60.0 | 44.6 | 55.4 | 57.8 | 42.2 | 61.0 | 39.0 |
| 1990 | 39.8 | 60.2 | 41.0 | 59.0 | 40.0 | 60.0 | 39.1 | 60.9 | 52.5 | 47.5 | 66.3 | 33.7 |
| 1991 | 38.3 | 61.7 | 36.5 | 63.5 | 38.0 | 62.0 | 39.1 | 60.9 | 51.9 | 48.1 | 64.2 | 35.8 |
| 1992 | 38.3 | 61.7 | 35.9 | 64.1 | 37.9 | 62.1 | 43.4 | 56.6 | 52.5 | 47.5 | 61.5 | 38.5 |
| 1993 | 37.2 | 62.8 | 34.1 | 65.9 | 36.6 | 63.4 | 35.6 | 64.4 | 49.2 | 50.8 | 64.1 | 35.9 |
| 1994 | 37.0 | 63.0 | 32.0 | 68.0 | 36.1 | 63.9 | 36.2 | 63.8 | 51.3 | 48.7 | 61.9 | 38.1 |
| 1995 | 36.8 | 63.2 | 34.2 | 65.8 | 36.3 | 63.7 | 38.4 | 61.6 | 47.7 | 52.3 | 62.3 | 37.7 |
| 1996 | 37.5 | 62.5 | 31.8 | 68.2 | 36.2 | 63.8 | 36.1 | 63.9 | 51.4 | 48.6 | 61.2 | 38.8 |
| 1997 | 38.4 | 61.7 | 34.5 | 65.5 | 37.4 | 62.6 | 37.4 | 62.6 | 47.8 | 52.2 | 60.9 | 39.1 |
| 1998 | 38.1 | 61.9 | 31.5 | 68.5 | 35.8 | 64.2 | 34.6 | 65.4 | 46.8 | 53.2 | 57.9 | 42.1 |
| 1999 | 39.4 | 60.6 | 33.1 | 66.9 | 36.5 | 63.5 | 34.5 | 65.5 | 44.8 | 55.2 | 61.6 | 38.4 |
| 2000 | 37.7 | 62.3 | 33.3 | 66.7 | 35.1 | 64.9 | 37.0 | 63.0 | 43.5 | 56.5 | 53.9 | 46.1 |
| 2001 | 39.4 | 60.6 | 34.0 | 66.0 | 35.5 | 64.5 | 37.5 | 62.5 | 39.5 | 60.5 | 56.3 | 43.7 |
| 2002 | 38.2 | 61.8 | 33.4 | 66.6 | 34.3 | 65.7 | 35.4 | 64.6 | 40.2 | 59.8 | 57.4 | 42.6 |
| 2003 | 36.1 | 63.9 | 35.1 | 64.9 | 35.2 | 64.8 | 37.8 | 62.2 | 42.2 | 57.8 | 54.7 | 45.3 |
| 2004 | 39.4 | 60.6 | 33.1 | 66.9 | 33.4 | 66.6 | 36.6 | 63.4 | 42.1 | 57.9 | 52.5 | 47.5 |
| 2005 | 61.5 | 38.5 | 31.8 | 68.2 | 31.9 | 68.1 | 36.1 | 63.9 | 37.2 | 62.8 | 50.1 | 49.9 |
| 2006 | NA | NA | 31.8 | 68.2 | 31.8 | 68.2 | 39.2 | 60.8 | 37.5 | 62.5 | 57.0 | 43.0 |
| 2007 | NA | NA | 32.3 | 67.7 | 32.3 | 67.7 | 20.6 | 79.4 | 39.1 | 60.9 | 53.4 | 46.6 |
| 2008 | NA | NA | 34.0 | 66.0 | 34.0 | 66.0 | 35.9 | 64.1 | 37.6 | 62.4 | 56.0 | 44.0 |
| 2009 | NA | NA | 35.6 | 64.4 | 35.6 | 64.4 | 33.9 | 66.1 | 48.4 | 51.6 | 49.8 | 50.2 |
| 2010 | NA | NA | 37.3 | 62.7 | 37.3 | 62.7 | 36.2 | 63.8 | 44.4 | 55.6 | 54.0 | 46.0 |
| 2011 | NA | NA | 38.2 | 61.8 | 38.2 | 61.8 | 40.2 | 59.8 | 42.8 | 57.2 | 53.1 | 46.9 |
| 2012 | NA | NA | 38.8 | 61.2 | 38.8 | 61.2 | 36.7 | 63.3 | 43.8 | 56.2 | 55.3 | 44.7 |
| 2013 | NA | NA | 38.3 | 61.7 | 38.3 | 61.7 | 38.4 | 61.6 | 40.5 | 59.5 | 49.7 | 50.3 |
| 2014 | NA | NA | 39.6 | 60.4 | 39.6 | 60.4 | 32.4 | 67.6 | 43.9 | 56.1 | 52.7 | 47.3 |
| 2015 | NA | NA | 38.4 | 61.6 | 38.4 | 61.6 | 32.2 | 67.8 | 45.3 | 54.7 | 55.6 | 44.4 |
| 2016 | NA | NA | 38.7 | 61.3 | 38.7 | 61.3 | 36.8 | 63.2 | 40.2 | 59.8 | 54.3 | 45.7 |

^aIncludes B.Pharm. degree

^bPharm.D.1 refers to the doctor of pharmacy degree awarded as the first professional degree

^cIncludes B.S. Pharmacy, B.Pharm., and Pharm.D.1 from 1981-2005. Includes only Pharm.D.1 beginning in 2006

^dPharm.D.2 refers to the doctor of pharmacy degree awarded as a postbaccalaureate degree

NA: Not applicable

Underrepresented minorities received 12.3% of the M.S. degrees conferred in 2015-16 (Black or African American, 6.6%; Hispanic or Latino, 5.0%; Native Hawaiian or Other Pacific Islander, 0.4%; American Indian or Alaska Native, 0.3%), an increase from 6.7% in 2014-15. Asian Americans received 10.7% of the M.S. degrees conferred, down from 11.7% in 2014-15. The percentage

of M.S. degree recipients who were of two or more races was 1.6% and the % of degree recipients who were foreign, nonpermanent residents of the U.S. was 35.3%, down from 48.8% in 2014-15 [Table 11].

Underrepresented minorities earned 5.9% of the Ph.D. degrees awarded in 2015-16 (Black or African American, 2.9%; Hispanic or Latino, 2.7%; Native Hawaiian or

Table 7. Percentage of First Professional Degree (B.S. Pharmacy, B.Pharm., and Pharm.D.1) Recipients 1980-2016 by Race/Ethnicity

| Year | White ^a | | Black or African American ^a | | Hispanic or Latino ^a | | Asian ^a | | Native Hawaiian or Pacific Islander ^a | | American Indian or Alaska Native ^a | | Two or More Races ^a | | International/Foreign ^b | |
|-------------------|--------------------|-------------|--|--------------|---------------------------------|-----------|--------------------|-----------|--|-----------|---|-----------|--------------------------------|-----------|------------------------------------|-------|
| | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) | n (%) |
| 1980 | 6,335 (85.2) | 249 (3.4) | 277 (3.7) | 292 (3.9) | NA | NA | 8 (0.1) | NA | NA | NA | 8 (0.1) | NA | NA | 49 (0.7) | 222 (3.0) | |
| 1981 | 6,205 (84.7) | 230 (3.1) | 361 (4.9) | 288 (3.9) | NA | NA | 5 (0.1) | NA | NA | NA | 5 (0.1) | NA | NA | 7 (0.1) | 227 (3.1) | |
| 1982 | 5,810 (84.7) | 250 (3.6) | 241 (3.5) | 317 (4.6) | NA | NA | 13 (0.2) | NA | NA | NA | 13 (0.2) | NA | NA | 18 (0.3) | 210 (3.1) | |
| 1983 | 5,189 (81.4) | 241 (3.8) | 261 (4.1) | 316 (5.0) | NA | NA | 8 (0.1) | NA | NA | NA | 8 (0.1) | NA | NA | 93 (1.5) | 266 (4.2) | |
| 1984 | 4,676 (78.4) | 242 (4.1) | 217 (3.6) | 339 (5.7) | NA | NA | 10 (0.2) | NA | NA | NA | 10 (0.2) | NA | NA | 174 (2.9) | 305 (5.1) | |
| 1985 | 4,591 (80.1) | 250 (4.4) | 245 (4.3) | 320 (5.6) | NA | NA | 6 (0.1) | NA | NA | NA | 6 (0.1) | NA | NA | 8 (0.1) | 315 (5.5) | |
| 1986 | 4,534 (78.2) | 306 (5.3) | 217 (3.7) | 333 (5.7) | NA | NA | 11 (0.2) | NA | NA | NA | 11 (0.2) | NA | NA | 0 (0.0) | 399 (6.9) | |
| 1987 | 4,559 (77.9) | 298 (5.1) | 258 (4.4) | 371 (6.3) | NA | NA | 8 (0.1) | NA | NA | NA | 8 (0.1) | NA | NA | 15 (0.3) | 345 (5.9) | |
| 1988 | 4,943 (79.9) | 282 (4.6) | 248 (4.0) | 335 (5.4) | NA | NA | 12 (0.2) | NA | NA | NA | 12 (0.2) | NA | NA | 27 (0.4) | 337 (5.4) | |
| 1989 | 5,040 (76.8) | 310 (4.7) | 249 (3.8) | 454 (6.9) | NA | NA | 12 (0.2) | NA | NA | NA | 12 (0.2) | NA | NA | 90 (1.4) | 405 (6.2) | |
| 1990 | 5,303 (76.2) | 368 (5.3) | 254 (3.7) | 586 (8.4) | NA | NA | 11 (0.2) | NA | NA | NA | 11 (0.2) | NA | NA | 88 (1.3) | 346 (5.0) | |
| 1991 | 5,381 (75.6) | 350 (4.9) | 288 (4.1) | 745 (10.5) | NA | NA | 20 (0.3) | NA | NA | NA | 20 (0.3) | NA | NA | 58 (0.8) | 280 (3.9) | |
| 1992 | 5,304 (74.6) | 381 (5.4) | 289 (4.1) | 771 (10.8) | NA | NA | 20 (0.3) | NA | NA | NA | 20 (0.3) | NA | NA | 40 (0.6) | 308 (4.3) | |
| 1993 | 5,346 (72.4) | 452 (6.1) | 260 (3.5) | 873 (11.8) | NA | NA | 19 (0.3) | NA | NA | NA | 19 (0.3) | NA | NA | 124 (1.7) | 306 (4.1) | |
| 1994 | 5,476 (73.0) | 385 (5.1) | 269 (3.6) | 972 (13.0) | NA | NA | 23 (0.3) | NA | NA | NA | 23 (0.3) | NA | NA | 122 (1.6) | 257 (3.4) | |
| 1995 | 5,584 (71.3) | 445 (5.7) | 282 (3.6) | 1,161 (14.8) | NA | NA | 28 (0.4) | NA | NA | NA | 28 (0.4) | NA | NA | 48 (0.6) | 289 (3.7) | |
| 1996 | 5,527 (69.1) | 528 (6.6) | 266 (3.3) | 1,328 (16.6) | NA | NA | 25 (0.3) | NA | NA | NA | 25 (0.3) | NA | NA | 56 (0.7) | 273 (3.4) | |
| 1997 | 5,364 (69.0) | 446 (5.7) | 282 (3.6) | 1,363 (17.5) | NA | NA | 34 (0.4) | NA | NA | NA | 34 (0.4) | NA | NA | 45 (0.6) | 238 (3.1) | |
| 1998 | 5,041 (68.1) | 444 (6.0) | 264 (3.6) | 1,404 (19.0) | NA | NA | 26 (0.4) | NA | NA | NA | 26 (0.4) | NA | NA | 58 (0.8) | 163 (2.2) | |
| 1999 | 4,597 (64.4) | 401 (5.6) | 266 (3.7) | 1,327 (18.6) | NA | NA | 36 (0.5) | NA | NA | NA | 36 (0.5) | NA | NA | 366 (5.1) | 148 (2.1) | |
| 2000 | 4,517 (62.2) | 480 (6.6) | 287 (4.0) | 1,505 (20.7) | NA | NA | 44 (0.6) | NA | NA | NA | 44 (0.6) | NA | NA | 223 (3.1) | 204 (2.8) | |
| 2001 | 4,469 (63.8) | 428 (6.1) | 253 (3.6) | 1,456 (20.8) | NA | NA | 26 (0.4) | NA | NA | NA | 26 (0.4) | NA | NA | 194 (2.8) | 174 (2.5) | |
| 2002 | 4,648 (61.4) | 575 (7.6) | 303 (4.0) | 1,625 (21.5) | NA | NA | 47 (0.6) | NA | NA | NA | 47 (0.6) | NA | NA | 198 (2.6) | 177 (2.3) | |
| 2003 | 4,473 (59.7) | 591 (7.9) | 310 (4.1) | 1,691 (22.6) | NA | NA | 38 (0.5) | NA | NA | NA | 38 (0.5) | NA | NA | 182 (2.4) | 203 (2.7) | |
| 2004 | 4,954 (60.7) | 612 (7.5) | 295 (3.6) | 1,857 (22.8) | NA | NA | 32 (0.4) | NA | NA | NA | 32 (0.4) | NA | NA | 190 (2.3) | 218 (2.7) | |
| 2005 | 5,031 (60.8) | 720 (8.7) | 361 (4.4) | 1,683 (20.4) | NA | NA | 52 (0.6) | NA | NA | NA | 52 (0.6) | NA | NA | 226 (2.7) | 195 (2.4) | |
| 2006 ^c | 5,650 (62.5) | 668 (7.4) | 377 (4.2) | 1,822 (20.2) | NA | NA | 39 (0.4) | NA | NA | NA | 39 (0.4) | NA | NA | 265 (2.9) | 219 (2.4) | |
| 2007 | 6,182 (63.0) | 682 (7.0) | 386 (3.9) | 1,970 (20.1) | NA | NA | 53 (0.5) | NA | NA | NA | 53 (0.5) | NA | NA | 337 (3.4) | 202 (2.1) | |
| 2008 | 6,560 (62.5) | 702 (6.7) | 407 (3.9) | 2,106 (20.1) | NA | NA | 61 (0.6) | NA | NA | NA | 61 (0.6) | NA | NA | 424 (4.0) | 240 (2.3) | |
| 2009 | 6,660 (60.6) | 688 (6.3) | 454 (4.1) | 2,333 (21.2) | NA | NA | 64 (0.6) | NA | NA | NA | 64 (0.6) | NA | NA | 497 (4.5) | 292 (2.7) | |
| 2010 | 6,880 (59.9) | 744 (6.5) | 489 (4.3) | 2,463 (21.4) | NA | NA | 50 (0.4) | NA | NA | NA | 50 (0.4) | NA | NA | 602 (5.2) | 259 (2.3) | |
| 2011 | 7,136 (59.8) | 763 (6.4) | 512 (4.3) | 2,570 (21.5) | 43 (0.4) | 43 (0.4) | 42 (0.4) | 43 (0.4) | 37 (0.3) | 37 (0.3) | 42 (0.4) | 37 (0.3) | 37 (0.3) | 520 (4.4) | 308 (2.6) | |
| 2012 | 7,396 (58.1) | 832 (6.5) | 532 (4.2) | 2,784 (21.9) | 198 (1.6) | 198 (1.6) | 61 (0.5) | 198 (1.6) | 98 (0.8) | 98 (0.8) | 61 (0.5) | 98 (0.8) | 98 (0.8) | 537 (4.2) | 281 (2.2) | |
| 2013 | 7,479 (56.6) | 916 (6.9) | 563 (4.3) | 3,024 (22.9) | 45 (0.3) | 45 (0.3) | 52 (0.4) | 45 (0.3) | 91 (0.7) | 91 (0.7) | 52 (0.4) | 91 (0.7) | 91 (0.7) | 744 (5.6) | 293 (2.2) | |
| 2014 | 7,564 (54.7) | 942 (6.8) | 602 (4.4) | 3,335 (24.1) | 30 (0.2) | 30 (0.2) | 44 (0.3) | 30 (0.2) | 174 (1.3) | 174 (1.3) | 44 (0.3) | 174 (1.3) | 174 (1.3) | 844 (6.1) | 303 (2.2) | |
| 2015 | 7,653 (54.7) | 961 (6.9) | 578 (4.1) | 3,437 (24.6) | 44 (0.3) | 44 (0.3) | 63 (0.5) | 44 (0.3) | 248 (1.8) | 248 (1.8) | 63 (0.5) | 248 (1.8) | 248 (1.8) | 605 (4.3) | 405 (2.9) | |
| 2016 | 7,746 (53.2) | 1,057 (7.3) | 643 (4.4) | 3,586 (24.6) | 32 (0.2) | 32 (0.2) | 48 (0.3) | 32 (0.2) | 324 (2.2) | 324 (2.2) | 48 (0.3) | 324 (2.2) | 324 (2.2) | 725 (5.0) | 395 (2.7) | |

^aU.S. citizen or permanent resident

^bCitizens of a foreign country/permanent residents of a country other than the U.S

^cIncludes only Pharm.D.1 degrees from 2006 onward

NA: Not available

Table 8. Percentage of Postbaccalaureate Doctor of Pharmacy Degree (Pharm.D.2) Recipients 1980-2016 by Race/Ethnicity

| Year | White ^a n (%) | Black or African American ^a n (%) | Hispanic or Latino ^a n (%) | Asian ^a n (%) | Native Hawaiian or Other Pacific Islander ^a n (%) | American Indian or Alaska Native ^a n (%) | Two or More Races ^a n (%) | Unknown ^a n (%) | International/ Foreign ^b n (%) |
|------|-----------------------------|---|--|-----------------------------|---|---|---|-------------------------------|---|
| 1980 | 161(89.4) | 4 (2.2) | 2 (1.1) | 3 (1.7) | NA | 0 (0.0) | NA | 0 (0.0) | 10 (5.6) |
| 1981 | 171 (81.4) | 7 (3.3) | 9 (4.3) | 5 (2.4) | NA | 0 (0.0) | NA | 1 (0.5) | 17 (8.1) |
| 1982 | 172 (83.1) | 6 (2.9) | 3 (1.4) | 9 (4.3) | NA | 1 (0.5) | NA | 0 (0.0) | 16 (7.7) |
| 1983 | 217 (80.1) | 23 (8.5) | 7 (2.6) | 9(3.3) | NA | 0 (0.0) | NA | 0 (0.0) | 15 (5.5) |
| 1984 | 268 (81.0) | 10 (3.0) | 5 (1.5) | 8 (2.4) | NA | 0 (0.0) | NA | 4 (1.2) | 36 (10.9) |
| 1985 | 174 (77.7) | 13 (5.8) | 2 (0.9) | 7 (3.1) | NA | 1 (0.4) | NA | 6 (2.7) | 21 (9.4) |
| 1986 | 154 (73.3) | 15 (7.1) | 6 (2.9) | 6 (2.9) | NA | 0 (0.0) | NA | 0 (0.0) | 29 (13.8) |
| 1987 | 170 (80.2) | 5 (2.4) | 7 (3.3) | 6 (2.8) | NA | 0 (0.0) | NA | 4 (1.9) | 20 (9.4) |
| 1988 | 124 (78.0) | 5 (3.1) | 1 (0.6) | 3 (1.9) | NA | 0 (0.0) | NA | 0 (0.0) | 26 (16.4) |
| 1989 | 171 (77.0) | 9 (4.1) | 3 (1.4) | 14 (6.3) | NA | 0 (0.0) | NA | 0 (0.0) | 25 (11.3) |
| 1990 | 244 (80.8) | 13 (4.3) | 10 (3.3) | 10 (3.3) | NA | 0 (0.0) | NA | 4 (1.3) | 21 (7.0) |
| 1991 | 217 (80.1) | 11 (4.1) | 4 (1.5) | 11 (4.1) | NA | 0 (0.0) | NA | 2 (0.7) | 26 (9.6) |
| 1992 | 232 (81.1) | 15 (5.2) | 2 (0.7) | 6 (2.1) | NA | 0 (0.0) | NA | 1 (0.3) | 30 (10.5) |
| 1993 | 308 (77.8) | 17 (4.3) | 9 (2.3) | 16 (4.0) | NA | 2 (0.5) | NA | 6 (1.5) | 38 (9.6) |
| 1994 | 462 (80.3) | 26 (4.5) | 12 (2.1) | 33 (5.7) | NA | 0 (0.0) | NA | 1 (0.2) | 41 (7.1) |
| 1995 | 573 (81.4) | 38 (5.4) | 10 (1.4) | 47 (6.7) | NA | 2 (0.3) | NA | 2 (0.3) | 32 (4.5) |
| 1996 | 589 (80.5) | 34 (4.6) | 11 (1.5) | 55 (7.5) | NA | 1 (0.1) | NA | 6 (0.8) | 36 (4.9) |
| 1997 | 674 (78.5) | 59 (6.9) | 5 (0.6) | 64 (7.5) | NA | 3 (0.4) | NA | 12 (1.4) | 42 (4.9) |
| 1998 | 786 (77.5) | 41 (4.0) | 12 (1.2) | 125 (12.3) | NA | 0 (0.0) | NA | 6 (0.6) | 44 (4.3) |
| 1999 | 627 (68.7) | 59 (6.5) | 35 (3.8) | 108 (11.8) | NA | 7 (0.8) | NA | 53 (5.8) | 24 (2.6) |
| 2000 | 897 (70.7) | 67 (5.3) | 54 (4.3) | 175 (13.8) | NA | 10 (0.8) | NA | 31 (2.4) | 35 (2.8) |
| 2001 | 690 (70.0) | 62 (6.3) | 23 (2.3) | 153 (15.6) | NA | 9 (0.9) | NA | 20 (2.0) | 22 (2.2) |
| 2002 | 533 (68.3) | 43 (5.5) | 29 (3.7) | 125 (16.0) | NA | 4 (0.5) | NA | 31 (4.0) | 15 (1.9) |
| 2003 | 567 (63.4) | 57 (6.4) | 34 (3.8) | 149 (16.6) | NA | 4 (0.4) | NA | 60 (6.7) | 24 (2.7) |
| 2004 | 472 (62.4) | 80 (10.6) | 43 (5.7) | 89 (11.8) | NA | 4 (0.5) | NA | 30 (4.0) | 38 (5.0) |
| 2005 | 351 (52.5) | 55 (8.2) | 53 (7.9) | 86 (12.9) | NA | 3 (0.4) | NA | 84 (12.6) | 36 (5.4) |
| 2006 | 284 (55.1) | 42 (8.2) | 29 (5.6) | 68 (13.2) | NA | 0 (0.0) | NA | 54 (10.5) | 38 (7.4) |
| 2007 | 187 (39.8) | 97 (20.6) | 47 (10.0) | 72 (15.3) | NA | 3 (0.6) | NA | 32 (6.8) | 32 (6.8) |
| 2008 | 344 (54.9) | 61 (9.7) | 22 (3.5) | 103 (16.4) | NA | 1 (0.2) | NA | 36 (5.7) | 60 (9.6) |
| 2009 | 254 (48.1) | 46 (8.7) | 23 (4.4) | 97 (18.4) | NA | 2 (0.4) | NA | 35 (6.6) | 71 (13.4) |
| 2010 | 193 (36.6) | 53 (10.1) | 33 (6.3) | 91 (17.3) | NA | 2 (0.4) | NA | 65 (12.3) | 90 (17.1) |
| 2011 | 162 (39.0) | 47 (11.3) | 32 (7.7) | 79 (19.0) | 4 (1.0) | 1 (0.2) | 0 (0.0) | 24 (5.8) | 66 (15.9) |
| 2012 | 182 (41.0) | 46 (10.4) | 26 (5.9) | 96 (21.6) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 42 (9.5) | 52 (11.7) |
| 2013 | 139 (40.4) | 36 (10.5) | 14 (4.1) | 66 (19.2) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 21 (6.1) | 68 (19.8) |
| 2014 | 121 (35.7) | 52 (15.3) | 17 (5.0) | 79 (23.3) | 0 (0.0) | 2 (0.6) | 1 (0.3) | 33 (9.7) | 34 (10.0) |
| 2015 | 86 (31.5) | 29 (10.6) | 9 (3.3) | 50 (18.3) | 0 (0.0) | 1 (0.4) | 0 (0.0) | 49 (17.9) | 49 (17.9) |
| 2016 | 93 (28.5) | 58 (17.8) | 8 (2.5) | 63 (19.3) | 3 (0.9) | 1 (0.3) | 0 (0.0) | 49 (15.0) | 51 (15.6) |

^aU.S. citizen or permanent resident

^bCitizens of a foreign country/permanent residents of a country other than the U.S

NA: Not available

Other Pacific Islander, 0.0%; American Indian or Alaska Native, 0.2%), a slight increase from 5.7% in 2014-15. Asian Americans earned 9.1% of the Ph.D. degrees awarded. The percentage of Ph.D. degree recipients who were of two or more races was 0.9% and the percentage of degree recipients that were foreign, nonpermanent residents of the U.S. was 48.6%, up from 45.6% in 2014-15 [Table 12].

FALL 2016 ENROLLMENTS

The 2016 Undergraduate and Professional Pharmacy Degree Enrollment Survey and Graduate Degree Enrollment Survey were conducted online in October 2016, with an announcement and request for participation sent to the survey coordinator at each of the 138 colleges and schools of pharmacy in the U.S. recognized by ACPE.

Table 9. Summary of Master of Science and Doctor of Philosophy Degrees Conferred 2015-16 by Gender and Discipline

| Discipline | M.S. Degree | | | | Ph.D. Degree | | | |
|------------------------------------|-------------|-----|-------|-----------------------------------|--------------|-----|-------|-----------------------------------|
| | M | F | Total | Percent of M.S. Degrees Conferred | M | F | Total | Percent of Ph.D. Degree Conferred |
| Medicinal chemistry | 73 | 130 | 203 | 19.8 | 62 | 40 | 102 | 18.6 |
| Pharmacology | 53 | 70 | 123 | 12.0 | 66 | 57 | 123 | 22.5 |
| Social and administrative sciences | 100 | 176 | 276 | 27.0 | 26 | 31 | 57 | 10.4 |
| Pharmacy practice | 52 | 80 | 132 | 12.9 | 7 | 16 | 23 | 4.2 |
| Pharmaceutics | 120 | 134 | 254 | 24.8 | 106 | 95 | 201 | 36.7 |
| Other ^a | 13 | 22 | 35 | 3.4 | 30 | 11 | 41 | 7.5 |
| Total | 411 | 612 | 1,023 | | 297 | 250 | 547 | |

^aIncludes biophysics/biological & medical informatics, immunology, clinical pharmaceutical sciences, pharmaceutical & biomedical sciences, pharmacometric, and biomedical nanotechnology in M.S. programs and bioengineering/biophysics/biological & medical informatics, clinical pharmaceutical sciences, pharmaceutical & biomedical science, biomolecular science, and translational science in Ph.D. programs

Submission of the data was requested by December 2016. After follow-up correspondence, 137 colleges and schools (99.3%) submitted the requested information.

Professional Degree Programs

Fall 2016 enrollments in Pharm.D. as the first professional degree programs (n= 63,464) represented a 0.0% increase from enrollments in fall 2015 (n= 63,460) [Table 13]. In fall 2016, 61.9% of the students enrolled in the Pharm.D. as the first professional degree programs were females and 38.1% were males [Table 14].

White Americans comprised the majority (50.5%) of students enrolled in the Pharm.D. as the first professional degree programs. Asian Americans accounted for 25.0%; Black or African Americans, 8.4%; Hispanic or Latino, 5.3%; Native Hawaiians/Other Pacific Islanders, 0.4%; American Indians/Alaska Natives, 0.3%; and international/foreign students, 3.1%. Students that identified as two or more races accounted for 2.4 % of all first professional degree enrollments. Students where race/ethnicity was unknown accounted for 4.6 % of enrollees. Enrollments of underrepresented minorities (Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native) as a percentage of total enrollments in the Pharm.D. as a first professional degree programs increased to 14.4% in fall 2016 from 13.6% in fall 2015 [Table 15].

Eight colleges and schools reported 840 students who already held a baccalaureate in pharmacy enrolled in doctor of pharmacy degree programs (Pharm.D.2). This was a decrease of 10.3% from fall 2015. Underrepresented minorities accounted for 24.4% of these students (Black or African American, 20.5%; Hispanic, 3.6%; Native Hawaiians/Other Pacific Islander, 0.0%; American Indians/Alaska Native, 0.4%). White Americans comprised 29.4%; Asian Americans, 23.2%; students of two

or more races, 1.0%; unknown, 11.0%; and international/foreign students, 11.1%.

Graduate Degree Programs

In fall 2016, the discipline of pharmaceutics had the highest percentage of full-time enrollees at both the M.S. and Ph.D. levels (36.3% and 36.6%, respectively). At the master's level, 20.9% of the students were in enrolled in social and administrative sciences programs; 14.0% in pharmacology programs; 11.9% in other disciplines; 10.6% in pharmacy practice programs; and 6.4% in medicinal chemistry programs. At the doctoral level, 22.2% of the students were enrolled in medicinal chemistry programs; 17.2% in pharmacology programs; 10.8% in social and administrative science programs; 8.7% in other disciplines; and 4.4% in pharmacy practice [Table 16].

In fall 2016, more females than males were enrolled full-time in M.S. degree programs (females, 60.7%; males, 39.3%). Women accounted for 48.1% of the students enrolled full-time in Ph.D. programs in 2016, an increase from 47.1% in 2015. Of the 1,241 students enrolled full-time in M.S. degree programs in fall 2016, the majority (55.4%) were foreign students. White Americans comprised 25.3% of enrollees and Asian Americans accounted for 7.4%. Underrepresented minorities accounted for 7.6% of M.S. enrollees (Black or African American, 4.0%; Hispanic or Latino, 3.3%; Native Hawaiian or Other Pacific Islander, 0.2%; American Indian or Alaska Native, 0.1%). Americans of two or more races made up 2.3% of enrollees and 1.9% of all full-time M.S. degree enrollees were reported as race/ethnicity unknown.

Of the 3,350 students enrolled full-time in Ph.D. degree programs in fall 2016, foreign students were also the largest group, accounting for 53.4% of the enrollees. White Americans were the next largest group at 29.8% of full time enrollments, followed by Asian Americans

Table 10. Number of Doctor of Philosophy Degrees (Ph.D.) Conferred 1980-2016 by Gender and Race/Ethnicity

| Year | Black or | | | | | | | | | | | | Native Hawaiian or | | | | | | | | | | | | Two or More | | | | | | | | | | | | International/ Foreign ^b | | | | | | | | | | | | Total | | | | | | | | | | | |
|------|--------------------|----|-----|----|----|----|---------------------------------|----|----|----|----|----|--------------------|----|----|----|----|----|-------------------------------------|----|---|---|----|----|---|----|-----|-----|-----|-----|--------------------|-----|-----|-----|-----|---|--|---|---|---|---|---|----------------------|---|---|---|---|---|-------|--|--|--|--|--|--|--|--|--|--|--|
| | White ^a | | | | | | Hispanic or Latino ^a | | | | | | Asian ^a | | | | | | Other Pacific Islander ^a | | | | | | American Indian or Alaska Native ^a | | | | | | Races ^a | | | | | | Unknown ^a | | | | | | Foreign ^b | | | | | | Total | | | | | | | | | | | |
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | | | | | | | | | | | | |
| 1980 | 96 | 16 | 112 | 3 | 0 | 3 | 1 | 0 | 1 | 0 | 1 | 10 | 2 | 12 | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 2 | 1 | 3 | 43 | 15 | 58 | 155 | 34 | 189 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1981 | 112 | 21 | 133 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 6 | 2 | 8 | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 0 | 0 | 0 | 32 | 5 | 37 | 152 | 28 | 180 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1982 | 105 | 21 | 126 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 2 | 1 | 3 | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 1 | 0 | 1 | 36 | 14 | 50 | 146 | 36 | 182 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1983 | 104 | 28 | 132 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 3 | 9 | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 3 | 1 | 4 | 40 | 22 | 62 | 154 | 54 | 208 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1984 | 105 | 30 | 135 | 2 | 0 | 2 | 5 | 2 | 7 | 11 | 2 | 13 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 6 | 0 | 6 | 45 | 19 | 64 | 174 | 53 | 227 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1985 | 106 | 34 | 140 | 2 | 0 | 2 | 1 | 1 | 2 | 6 | 4 | 10 | NA | NA | NA | NA | NA | NA | NA | 1 | 0 | 1 | NA | NA | NA | 0 | 0 | 0 | 59 | 18 | 77 | 175 | 57 | 232 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1986 | 112 | 48 | 160 | 2 | 0 | 2 | 1 | 0 | 1 | 0 | 1 | 4 | 2 | 6 | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 0 | 0 | 0 | 73 | 18 | 91 | 192 | 68 | 260 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1987 | 119 | 43 | 162 | 2 | 0 | 2 | 4 | 0 | 4 | 7 | 6 | 13 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 7 | 1 | 8 | 64 | 30 | 94 | 203 | 80 | 283 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1988 | 97 | 48 | 145 | 1 | 1 | 2 | 3 | 0 | 3 | 4 | 2 | 6 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 1 | 1 | 2 | 82 | 23 | 105 | 188 | 75 | 263 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1989 | 100 | 54 | 154 | 1 | 3 | 4 | 2 | 2 | 4 | 6 | 4 | 10 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 3 | 3 | 6 | 63 | 46 | 109 | 175 | 112 | 287 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1990 | 100 | 51 | 151 | 4 | 3 | 7 | 1 | 0 | 1 | 17 | 7 | 24 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 6 | 2 | 8 | 53 | 29 | 82 | 181 | 92 | 273 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1991 | 104 | 64 | 168 | 5 | 3 | 8 | 3 | 0 | 3 | 12 | 14 | 26 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 5 | 0 | 5 | 72 | 31 | 103 | 201 | 112 | 313 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1992 | 78 | 60 | 138 | 5 | 3 | 8 | 3 | 1 | 4 | 12 | 9 | 21 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 3 | 1 | 4 | 94 | 48 | 142 | 195 | 122 | 317 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1993 | 110 | 50 | 160 | 1 | 4 | 5 | 2 | 1 | 3 | 10 | 10 | 20 | NA | NA | NA | NA | NA | NA | NA | 1 | 0 | 1 | NA | NA | NA | 0 | 0 | 0 | 99 | 60 | 159 | 223 | 125 | 348 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1994 | 95 | 56 | 151 | 2 | 4 | 6 | 2 | 2 | 4 | 16 | 9 | 25 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 2 | 0 | 2 | 82 | 51 | 133 | 198 | 122 | 320 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1995 | 95 | 53 | 148 | 5 | 5 | 10 | 1 | 4 | 5 | 20 | 13 | 33 | NA | NA | NA | NA | NA | NA | NA | 1 | 1 | 2 | NA | NA | NA | 3 | 1 | 4 | 93 | 55 | 148 | 218 | 132 | 350 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1996 | 83 | 52 | 135 | 3 | 6 | 9 | 1 | 4 | 5 | 11 | 12 | 23 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 2 | 1 | 3 | 86 | 43 | 129 | 186 | 118 | 304 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1997 | 87 | 58 | 145 | 6 | 4 | 10 | 1 | 2 | 3 | 12 | 13 | 25 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 7 | 0 | 7 | 105 | 63 | 168 | 218 | 140 | 358 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1998 | 101 | 65 | 166 | 4 | 10 | 14 | 5 | 1 | 6 | 14 | 18 | 32 | NA | NA | NA | NA | NA | NA | NA | 2 | 0 | 2 | NA | NA | NA | 1 | 3 | 4 | 111 | 76 | 187 | 238 | 173 | 411 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1999 | 82 | 49 | 131 | 6 | 7 | 13 | 4 | 2 | 6 | 22 | 17 | 39 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 12 | 3 | 15 | 95 | 60 | 155 | 221 | 138 | 359 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2000 | 61 | 62 | 123 | 5 | 6 | 11 | 0 | 0 | 0 | 23 | 15 | 38 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 6 | 14 | 20 | 79 | 52 | 131 | 174 | 149 | 323 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2001 | 83 | 46 | 129 | 5 | 10 | 15 | 4 | 2 | 6 | 27 | 27 | 54 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 3 | 1 | 4 | 89 | 78 | 167 | 211 | 164 | 375 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2002 | 92 | 59 | 151 | 2 | 6 | 8 | 2 | 3 | 5 | 14 | 13 | 27 | NA | NA | NA | NA | NA | NA | NA | 2 | 0 | 2 | NA | NA | NA | 3 | 4 | 7 | 101 | 75 | 176 | 216 | 160 | 376 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2003 | 77 | 62 | 139 | 5 | 8 | 13 | 7 | 2 | 9 | 19 | 13 | 32 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 4 | 1 | 5 | 98 | 88 | 186 | 210 | 174 | 384 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2004 | 67 | 47 | 114 | 6 | 5 | 11 | 2 | 3 | 5 | 15 | 16 | 31 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 3 | 1 | 4 | 83 | 87 | 170 | 176 | 159 | 335 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2005 | 66 | 43 | 109 | 10 | 9 | 19 | 5 | 3 | 8 | 10 | 25 | 35 | NA | NA | NA | NA | NA | NA | NA | 1 | 1 | 2 | NA | NA | NA | 3 | 3 | 6 | 120 | 130 | 250 | 215 | 214 | 429 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2006 | 82 | 45 | 127 | 5 | 12 | 17 | 5 | 3 | 8 | 19 | 15 | 34 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 2 | 0 | 2 | 139 | 115 | 254 | 252 | 190 | 442 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2007 | 78 | 50 | 128 | 5 | 11 | 16 | 4 | 4 | 8 | 19 | 16 | 35 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 1 | 4 | 5 | 113 | 107 | 220 | 220 | 192 | 412 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2008 | 104 | 60 | 164 | 4 | 7 | 11 | 4 | 5 | 9 | 27 | 19 | 46 | NA | NA | NA | NA | NA | NA | NA | 0 | 2 | 2 | NA | NA | NA | 7 | 8 | 15 | 116 | 105 | 221 | 262 | 206 | 468 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2009 | 80 | 71 | 151 | 7 | 11 | 18 | 3 | 7 | 10 | 31 | 23 | 54 | NA | NA | NA | NA | NA | NA | NA | 0 | 0 | 0 | NA | NA | NA | 7 | 7 | 14 | 100 | 111 | 211 | 228 | 230 | 458 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2010 | 81 | 81 | 162 | 3 | 10 | 13 | 2 | 6 | 8 | 25 | 23 | 48 | NA | NA | NA | NA | NA | NA | NA | 0 | 1 | 1 | NA | NA | NA | 11 | 7 | 18 | 121 | 79 | 200 | 243 | 207 | 450 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011 | 74 | 67 | 141 | 11 | 23 | 34 | 7 | 2 | 9 | 28 | 22 | 50 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 5 | 5 | 11 | 16 | 120 | 92 | 212 | 250 | 221 | 471 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2012 | 82 | 66 | 148 | 11 | 14 | 25 | 7 | 11 | 18 | 34 | 27 | 61 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 0 | 2 | 0 | 2 | 21 | 9 | 30 | 116 | 94 | 210 | 275 | 222 | 497 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2013 | 83 | 74 | 157 | 8 | 14 | 22 | 9 | 11 | 20 | 31 | 37 | 68 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 9 | 10 | 10 | 20 | 147 | 145 | 292 | 293 | 296 | 589 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2014 | 103 | 73 | 176 | 11 | 14 | 25 | 4 | 6 | 10 | 26 | 33 | 59 | 0 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 8 | 7 | 15 | 144 | 130 | 274 | 298 | 267 | 565 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2015 | 101 | 70 | 171 | 6 | 12 | 18 | 10 | 3 | 13 | 46 | 44 | 90 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 2 | 2 | 7 | 3 | 10 | 142 | 114 | 256 | 312 | 249 | 561 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2016 | 97 | 82 | 179 | 7 | 9 | 16 | 7 | 8 | 15 | 21 | 29 | 50 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 2 | 5 | 10 | 5 | 15 | 152 | 114 | 266 | 297 | 250 | 547 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

^aU.S. citizen or permanent resident

^bCitizens of a foreign country/permanent residents of a country other than the U.S

NA: Not available

Table 11. Percentage of Master of Science (M.S.) Degree Recipients 1990-2016 by Race/Ethnicity

| Year | White ^a n (%) | Black or African American ^a n (%) | Hispanic or Latino ^a n (%) | Asian ^a n (%) | Native Hawaiian or Other Pacific Islander ^a n (%) | American | Two or More Races ^a n (%) | Unknown ^a n (%) | International/ Foreign ^b n (%) |
|------|-----------------------------|---|--|-----------------------------|---|---|---|-------------------------------|---|
| | | | | | | Indian or Alaska Native ^a n (%) | | | |
| 1980 | 299 (64.3) | 10 (2.2) | 3 (0.6) | 27 (5.8) | NA | 0 (0.0) | NA | 41 (8.8) | 85 (18.3) |
| 1981 | 305 (70.3) | 17 (3.9) | 2 (0.5) | 14 (3.2) | NA | 0 (0.0) | NA | 1 (0.2) | 95 (21.9) |
| 1982 | 282 (61.6) | 5 (1.1) | 6 (1.3) | 6 (1.3) | NA | 1 (0.2) | NA | 27 (5.9) | 131 (28.6) |
| 1983 | 282 (66.2) | 2 (0.5) | 4 (0.9) | 10 (2.3) | NA | 0 (0.0) | NA | 40 (9.4) | 88 (20.7) |
| 1984 | 254 (64.5) | 8 (2.0) | 4 (1.0) | 16 (4.1) | NA | 0 (0.0) | NA | 21 (5.3) | 91 (23.1) |
| 1985 | 215 (63.6) | 10 (3.0) | 3 (0.9) | 11 (3.3) | NA | 0 (0.0) | NA | 1 (0.3) | 98 (29.0) |
| 1986 | 282 (68.0) | 6 (1.4) | 8 (1.9) | 7 (1.7) | NA | 1 (0.2) | NA | 0 (0.0) | 111 (26.7) |
| 1987 | 231 (66.4) | 6 (1.7) | 4 (1.1) | 11 (3.2) | NA | 0 (0.0) | NA | 14 (4.0) | 82 (23.6) |
| 1988 | 227 (64.3) | 12 (3.4) | 4 (1.1) | 9 (2.5) | NA | 2 (0.6) | NA | 2 (0.6) | 97 (27.5) |
| 1989 | 234 (59.8) | 8 (2.0) | 7 (1.8) | 16 (4.1) | NA | 0 (0.0) | NA | 2 (0.5) | 124 (31.7) |
| 1990 | 209 (54.3) | 12 (3.1) | 11 (2.9) | 28 (7.3) | NA | 1 (0.3) | NA | 8 (2.1) | 116 (30.1) |
| 1991 | 218 (59.9) | 13 (3.6) | 7 (1.9) | 27 (7.4) | NA | 0 (0.0) | NA | 2 (0.5) | 97 (26.6) |
| 1992 | 140 (49.6) | 14 (5.0) | 9 (3.2) | 14 (5.0) | NA | 0 (0.0) | NA | 5 (1.8) | 100 (35.5) |
| 1993 | 149 (49.5) | 9 (3.0) | 20 (6.6) | 13 (4.3) | NA | 0 (0.0) | NA | 5 (1.7) | 105 (34.9) |
| 1994 | 169 (47.6) | 8 (2.3) | 13 (3.7) | 19 (5.4) | NA | 0 (0.0) | NA | 5 (1.4) | 141 (39.7) |
| 1995 | 206 (52.6) | 16 (4.1) | 16 (4.1) | 32 (8.2) | NA | 0 (0.0) | NA | 1 (0.3) | 121 (30.9) |
| 1996 | 236 (55.9) | 12 (2.8) | 16 (3.8) | 23 (5.5) | NA | 0 (0.0) | NA | 8 (1.9) | 127 (30.1) |
| 1997 | 194 (48.5) | 18 (4.5) | 17 (4.3) | 36 (9.0) | NA | 0 (0.0) | NA | 5 (1.3) | 130 (32.5) |
| 1998 | 213 (50.6) | 14 (3.3) | 19 (4.5) | 38 (9.0) | NA | 1 (0.2) | NA | 13 (3.1) | 123 (29.2) |
| 1999 | 173 (45.1) | 20 (5.2) | 8 (2.1) | 31 (8.1) | NA | 0 (0.0) | NA | 19 (4.9) | 133 (34.6) |
| 2000 | 172 (48.6) | 13 (3.7) | 13 (3.7) | 36 (10.2) | NA | 1 (0.3) | NA | 2 (0.6) | 117 (33.1) |
| 2001 | 214 (46.4) | 26 (5.6) | 18 (3.9) | 46 (10.0) | NA | 1 (0.2) | NA | 12 (2.6) | 144 (31.2) |
| 2002 | 181 (40.9) | 17 (3.8) | 16 (3.6) | 43 (9.7) | NA | 0 (0.0) | NA | 15 (3.4) | 171 (38.6) |
| 2003 | 206 (43.6) | 35 (7.4) | 11 (2.3) | 68 (14.4) | NA | 0 (0.0) | NA | 16 (3.4) | 136 (28.8) |
| 2004 | 280 (43.0) | 51 (7.8) | 26 (4.0) | 89 (13.7) | NA | 1 (0.2) | NA | 39 (6.0) | 165 (25.3) |
| 2005 | 270 (43.1) | 42 (6.7) | 19 (3.0) | 80 (12.8) | NA | 2 (0.3) | NA | 69 (11.0) | 144 (23.0) |
| 2006 | 274 (42.5) | 52 (8.1) | 28 (4.3) | 49 (7.6) | NA | 2 (0.3) | NA | 57 (8.9) | 182 (28.3) |
| 2007 | 278 (46.0) | 49 (8.1) | 12 (2.0) | 84 (13.9) | NA | 2 (0.3) | NA | 51 (8.4) | 128 (21.2) |
| 2008 | 318 (43.4) | 35 (4.8) | 33 (4.5) | 75 (10.2) | NA | 1 (0.1) | NA | 64 (8.7) | 206 (28.1) |
| 2009 | 186 (24.3) | 30 (3.9) | 11 (1.4) | 85 (11.1) | NA | 0 (0.0) | NA | 75 (9.8) | 380 (49.5) |
| 2010 | 222 (28.7) | 22 (2.8) | 22 (2.8) | 78 (10.1) | NA | 1 (0.1) | NA | 73 (9.4) | 355 (45.9) |
| 2011 | 235 (28.6) | 38 (4.6) | 16 (1.9) | 78 (9.5) | 2 (0.2) | 2 (0.2) | 1 (0.1) | 66 (8.0) | 384 (46.7) |
| 2012 | 217 (31.9) | 24 (3.5) | 15 (2.2) | 81 (11.9) | 1 (0.1) | 4 (0.6) | 3 (0.4) | 27 (4.0) | 309 (45.4) |
| 2013 | 183 (27.9) | 24 (3.7) | 15 (2.3) | 72 (11.0) | 1 (0.2) | 3 (0.5) | 7 (1.1) | 31 (4.7) | 319 (48.7) |
| 2014 | 204 (26.3) | 38 (4.9) | 15 (1.9) | 75 (9.7) | 3 (0.4) | 0 (0.0) | 5 (0.6) | 49 (6.3) | 386 (49.8) |
| 2015 | 207 (28.8) | 28 (3.9) | 20 (2.8) | 84 (11.7) | 0 (0.0) | 0 (0.0) | 8 (1.1) | 22 (3.1) | 351 (48.8) |
| 2016 | 369 (36.1) | 68 (6.6) | 51 (5.0) | 109 (10.7) | 4 (0.4) | 3 (0.3) | 16 (1.6) | 42 (4.1) | 361 (35.3) |

^aU.S citizen or permanent resident

^bCitizen of a foreign country/permanent residents of a country other than the U.S

NA: Not available

6.7%. Underrepresented minorities accounted for 7.2% of Ph.D. enrollees (Black or African American, 3.9%; Hispanic or Latino, 2.9%; Native Hawaiian or Other Pacific Islander, 0.1%; American Indian or Alaska Native, 0.3%). Americans of two or more races accounted for 1.1% and 1.7% of all full-time Ph.D. degree enrollees were reported

as unknown. Over 40% (40.5) of full-time and part-time students in Ph.D. programs held a professional pharmacy degree, 9.7% of Ph.D. students held a professional pharmacy degree from a U.S. college or school of pharmacy and 30.9% held a pharmacy degree conferred by a non-U.S. institution [Table 17].

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Table 12. Percentage of Doctor of Philosophy Degree (Ph.D.) Recipients 1980-2016 by Race/Ethnicity

| Year | White ^a n (%) | Black or African American ^a n (%) | Hispanic or Latino ^a n (%) | Asian ^a n (%) | Native Hawaiian or Other Pacific Islander ^a n (%) | American Indian or Alaska Native ^a n (%) | Two or More Races ^a n (%) | Unknown ^a n (%) | International/ Foreign ^b n (%) |
|------|-----------------------------|---|---|-----------------------------|--|---|---|-------------------------------|---|
| 1980 | 112 (59.3) | 3 (1.6) | 1 (0.5) | 12 (6.3) | NA | 0 (0.0) | NA | 3 (1.6) | 58 (30.7) |
| 1981 | 133 (73.9) | 1 (0.6) | 1 (0.6) | 8 (4.4) | NA | 0 (0.0) | NA | 0 (0.0) | 37 (20.6) |
| 1982 | 126 (69.2) | 1 (0.5) | 1 (0.5) | 3 (1.6) | NA | 0 (0.0) | NA | 1 (0.5) | 50 (27.5) |
| 1983 | 132 (63.5) | 0 (0.0) | 1 (0.5) | 9 (4.3) | NA | 0 (0.0) | NA | 4 (1.9) | 62 (29.8) |
| 1984 | 135 (59.5) | 2 (0.9) | 7 (3.1) | 13 (5.7) | NA | 0 (0.0) | NA | 6 (2.6) | 64 (28.2) |
| 1985 | 140 (60.3) | 2 (0.9) | 2 (0.9) | 10 (4.3) | NA | 1 (0.4) | NA | 0 (0.0) | 77 (33.2) |
| 1986 | 160 (61.5) | 2 (0.8) | 1 (0.4) | 6 (2.3) | NA | 0 (0.0) | NA | 0 (0.0) | 91 (35.0) |
| 1987 | 162 (57.2) | 2 (0.7) | 4 (1.4) | 13 (4.6) | NA | 0 (0.0) | NA | 8 (2.8) | 94 (33.2) |
| 1988 | 145 (55.1) | 2 (0.8) | 3 (1.1) | 6 (2.3) | NA | 0 (0.0) | NA | 2 (0.8) | 105 (39.9) |
| 1989 | 154 (53.7) | 4 (1.4) | 4 (1.4) | 10 (3.5) | NA | 0 (0.0) | NA | 6 (2.1) | 109 (38.0) |
| 1990 | 151 (55.3) | 7 (2.6) | 1 (0.4) | 24 (8.8) | NA | 0 (0.0) | NA | 8 (2.9) | 82 (30.0) |
| 1991 | 168 (53.7) | 8 (2.6) | 3 (1.0) | 26 (8.3) | NA | 0 (0.0) | NA | 5 (1.6) | 103 (32.9) |
| 1992 | 138 (43.5) | 8 (2.5) | 4 (1.3) | 21 (6.6) | NA | 0 (0.0) | NA | 4 (1.3) | 142 (44.8) |
| 1993 | 160 (46.0) | 5 (1.4) | 3 (0.9) | 20 (5.7) | NA | 1 (0.3) | NA | 0 (0.0) | 159 (45.7) |
| 1994 | 150 (46.9) | 6 (1.9) | 4 (1.3) | 25 (7.8) | NA | 0 (0.0) | NA | 2 (0.6) | 133 (41.6) |
| 1995 | 148 (42.3) | 10 (2.9) | 5 (1.4) | 33 (9.4) | NA | 2 (0.6) | NA | 4 (1.1) | 148 (42.3) |
| 1996 | 135 (44.4) | 9 (3.0) | 5 (1.6) | 23 (7.6) | NA | 0 (0.0) | NA | 3 (1.0) | 129 (42.4) |
| 1997 | 145 (40.5) | 10 (2.8) | 3 (0.8) | 25 (7.0) | NA | 0 (0.0) | NA | 7 (2.0) | 168 (46.9) |
| 1998 | 166 (40.4) | 14 (3.4) | 6 (1.5) | 32 (7.8) | NA | 2 (0.5) | NA | 4 (1.0) | 187 (45.5) |
| 1999 | 131 (36.5) | 13 (3.6) | 6 (1.7) | 39 (10.9) | NA | 0 (0.0) | NA | 15 (4.2) | 155 (43.2) |
| 2000 | 123 (38.1) | 11 (3.4) | 0 (0.0) | 38 (11.8) | NA | 0 (0.0) | NA | 20 (6.2) | 131 (40.6) |
| 2001 | 129 (34.4) | 15 (4.0) | 6 (1.6) | 54 (14.4) | NA | 0 (0.0) | NA | 4 (1.1) | 167 (44.5) |
| 2002 | 151 (40.2) | 8 (2.1) | 5 (1.3) | 27 (7.2) | NA | 2 (0.5) | NA | 7 (1.9) | 176 (46.8) |
| 2003 | 139 (36.2) | 13 (3.4) | 9 (2.3) | 32 (8.3) | NA | 0 (0.0) | NA | 5 (1.3) | 186 (48.4) |
| 2004 | 114 (34.0) | 11 (3.3) | 5 (1.5) | 31 (9.3) | NA | 0 (0.0) | NA | 4 (1.2) | 170 (50.7) |
| 2005 | 109 (25.4) | 19 (4.4) | 8 (1.9) | 35 (8.2) | NA | 2 (0.5) | NA | 6 (1.4) | 250 (58.3) |
| 2006 | 127 (28.7) | 17 (3.8) | 8 (1.8) | 34 (7.7) | NA | 0 (0.0) | NA | 2 (0.5) | 254 (57.5) |
| 2007 | 128 (31.1) | 16 (3.9) | 8 (1.9) | 35 (8.5) | NA | 0 (0.0) | NA | 5 (1.2) | 220 (53.4) |
| 2008 | 164 (35.0) | 11 (2.4) | 9 (1.9) | 46 (9.8) | NA | 2 (0.4) | NA | 15 (3.2) | 221 (47.2) |
| 2009 | 151 (33.0) | 18 (3.9) | 10 (2.2) | 54 (11.8) | NA | 0 (0.0) | NA | 14 (3.1) | 211 (46.1) |
| 2010 | 162 (36.0) | 13 (2.9) | 8 (1.8) | 48 (10.7) | NA | 1 (0.2) | NA | 18 (4.0) | 200 (44.4) |
| 2011 | 141 (29.9) | 34 (7.2) | 9 (1.9) | 50 (10.6) | 4 (0.8) | 0 (0.0) | 5 (1.1) | 16 (3.4) | 212 (45.0) |
| 2012 | 148 (29.8) | 25 (5.0) | 18 (3.6) | 61 (12.3) | 1 (0.2) | 2 (0.4) | 2 (0.4) | 30 (6.0) | 210 (42.3) |
| 2013 | 157 (26.7) | 22 (3.7) | 20 (3.4) | 68 (11.5) | 0 (0.0) | 1 (0.2) | 9 (1.5) | 20 (3.4) | 292 (49.6) |
| 2014 | 176 (31.2) | 25 (4.4) | 10 (1.8) | 59 (10.4) | 2 (0.4) | 1 (0.2) | 3 (0.5) | 15 (2.7) | 274 (48.5) |
| 2015 | 171 (30.5) | 18 (3.2) | 13 (2.3) | 90 (16.0) | 0 (0.0) | 1 (0.2) | 2 (0.4) | 10 (1.8) | 256 (45.6) |
| 2016 | 179 (32.7) | 16 (2.9) | 15 (2.7) | 50 (9.1) | 0 (0.0) | 1 (0.2) | 5 (0.9) | 15 (2.7) | 266 (48.6) |

^aU.S. citizen or permanent resident

^bNonpermanent resident/citizen of a country other than the United States

Table 13. Summary of Enrollments in First Professional Degree Programs 1980-2016

| Year | First Professional Year Classes ^a | All Professional Years ^b | Total Enrollment |
|------|--|-------------------------------------|--------------------------|
| | No. (% Change) | No. (% Change) | No. (% Change) |
| 1980 | 7,377 | 22,093 | 26,617 |
| 1981 | 6,927 (-6.1) | 20,468 (-7.4) | 24,658 (-7.4) |
| 1982 | 6,609 (-4.6) | 19,350 (-5.5) | 23,410 (-5.1) |
| 1983 | 6,635 (0.4) | 18,831 (-2.7) | 23,091 (-1.4) |
| 1984 | 6,986 (5.3) | 18,646 (-1.0) | 23,312 (1.0) |
| 1985 | 7,091 (1.5) | 19,098 (2.4) | 24,820 (6.5) |
| 1986 | 7,554 (6.5) | 20,073 (5.1) | 25,643 (3.3) |
| 1987 | 7,751 (2.6) | 21,424 (6.7) | 27,292 (6.4) |
| 1988 | 7,990 (3.1) | 22,447 (4.8) | 28,891 (5.9) |
| 1989 | 8,033 (0.5) | 23,013 (2.5) | 29,560 (2.3) |
| 1990 | 8,267 (2.9) | 23,238 (1.0) | 29,797 (0.8) |
| 1991 | 8,343 (0.9) | 23,482 (1.1) | 30,314 (1.7) |
| 1992 | 8,664 (3.8) | 26,287 (NA) | 31,519 (4.0) |
| 1993 | 8,970 (3.5) | 27,143 (3.3) | 32,938 (4.5) |
| 1994 | 9,157 (2.1) | 27,667 (1.9) | 33,353 (1.3) |
| 1995 | 8,740 (-4.6) | 28,060 (1.4) | 33,415 (0.2) |
| 1996 | 9,561 (9.4) | 28,027 (-0.1) | 33,059 (-1.1) |
| 1997 | 8,571 (-10.4) | 28,345 (1.1) | 32,529 (-1.6) |
| 1998 | 8,346 (-2.6) | 28,568 (0.8) | 33,090 (1.7) |
| 1999 | 8,123 (-2.7) | 29,586 (3.6) | 32,537 (-1.7) |
| 2000 | 8,382 (3.2) | 30,301 (2.4) | 34,481 (6.0) |
| 2001 | 8,922 (6.4) | 31,769 (4.8) | 35,885 (4.1) |
| 2002 | 9,128 (2.3) | 33,437 (5.3) | 38,902 (8.4) |
| 2003 | 9,909 (8.6) | 36,454 (9.0) | 41,762 (10.7) |
| 2004 | 10,437 (5.3) | 38,544 (5.7) | 43,908 (— ^c) |
| 2005 | 10,506 (0.7) | 41,165 (6.8) | 46,527 (6.0) |
| 2006 | 10,992 (4.6) | 43,106 (4.7) | 48,592 (4.4) |
| 2007 | 11,533 (4.9) | 45,594 (5.8) | 50,691 (4.3) |
| 2008 | 12,379 (7.1) | 47,986 (5.2) | 52,685 (3.9) |
| 2009 | 12,705 (2.6) | 49,964 (4.1) | 54,710 (3.8) |
| 2010 | 13,077 (2.9) | 51,920 (3.9) | 56,841 (3.9) |
| 2011 | 13,464 (3.0) | 54,054 (4.1) | 58,915 (3.6) |
| 2012 | 14,011 (4.1) | 56,489 (4.5) | 61,275 (4.0) |
| 2013 | 14,008 (0.0) | 58,121 (2.9) | 62,743 (2.4) |
| 2014 | 14,276 (1.9) | 59,370 (2.1) | 63,927 (1.9) |
| 2015 | 14,190 (-0.6) | 59,720 (0.6) | 63,460 (-0.7) |
| 2016 | 13,975 (-1.5) | 59,978 (0.4) | 63,464 (0.0) |

^aIncludes second from last year for baccalaureate and third from last year for Pharm.D.1 and does not include first year enrollees in accelerated programs from 1980-2005. Includes third from last year Pharm.D.1 beginning in 2006

^bIncludes the final three years only of all first professional degree programs for 1980-1991; includes all professional years for 1992-present (3 years for baccalaureate and 4 years for Pharm.D.)

^cNot able to calculate percent change due to change in how data are reported by select institutions

Table 14. Summary of Enrollments in First Professional Degree Programs by Gender 1980-2016

| Year | Male | | Female | | Total Enrollment | |
|-------------------|---------------|-----------------------------|---------------|-----------------------------|------------------|-----------------------------|
| | No. (%) | % Change from Previous Year | No. (%) | % Change from Previous Year | No. | % Change from Previous Year |
| 1980 | 13,992 (52.6) | | 12,625 (47.4) | | 26,617 | |
| 1981 | 12,413 (50.3) | -11.3 | 12,245 (49.7) | -3.0 | 24,658 | -7.4 |
| 1982 | 11,271 (48.1) | -9.2 | 12,139 (51.9) | -0.9 | 23,410 | -5.1 |
| 1983 | 10,984 (47.6) | -2.5 | 12,107 (52.4) | -0.3 | 23,091 | -1.4 |
| 1984 | 10,345 (44.4) | -5.8 | 12,967 (55.6) | 7.1 | 23,312 | 1.0 |
| 1985 | 10,685 (43.0) | 3.3 | 14,135 (57.0) | 9.0 | 24,820 | 6.5 |
| 1986 | 10,628 (41.4) | -0.5 | 15,015 (58.6) | 6.2 | 25,643 | 3.3 |
| 1987 | 10,907 (40.0) | 2.6 | 16,385 (60.0) | 9.1 | 27,292 | 6.4 |
| 1988 | 11,382 (39.4) | 4.4 | 17,509 (60.6) | 6.9 | 28,891 | 5.9 |
| 1989 | 11,350 (38.4) | -0.3 | 18,210 (61.6) | 4.0 | 29,560 | 2.3 |
| 1990 | 11,198 (37.6) | -1.3 | 18,599 (62.4) | 2.1 | 29,797 | 0.8 |
| 1991 | 11,219 (37.0) | 0.2 | 19,095 (63.0) | 2.7 | 30,314 | 1.7 |
| 1992 | 11,543 (36.6) | 2.9 | 19,976 (63.4) | 4.6 | 31,519 | 4.0 |
| 1993 | 12,117 (36.8) | 5.0 | 20,821 (63.2) | 4.2 | 32,938 | 4.5 |
| 1994 | 12,243 (36.7) | 1.0 | 21,110 (63.3) | 1.4 | 33,353 | 1.3 |
| 1995 | 12,221 (36.6) | -0.2 | 21,194 (63.4) | 0.4 | 33,415 | 0.2 |
| 1996 | 11,966 (36.2) | -2.1 | 21,093 (63.8) | -0.5 | 33,059 | -1.1 |
| 1997 | 11,652 (35.8) | -2.6 | 20,877 (64.2) | -1.0 | 32,529 | -1.6 |
| 1998 | 11,777 (35.6) | 1.1 | 21,313 (64.4) | 2.1 | 33,090 | 1.7 |
| 1999 | 11,411 (35.1) | -3.1 | 21,126 (64.9) | -0.9 | 32,537 | -1.7 |
| 2000 | 11,763 (34.1) | 3.1 | 22,718 (65.9) | 7.5 | 34,481 | 6.0 |
| 2001 | 12,253 (34.1) | 4.2 | 23,632 (65.9) | 4.0 | 35,885 | 4.1 |
| 2002 | 12,815 (33.0) | 4.6 | 26,087 (67.0) | 9.1 | 38902 | 8.4 |
| 2003 | 13,874 (33.2) | 11.3 | 27,888 (66.8) | 10.3 | 41,762 | 10.7 |
| 2004 ^a | 14,696 (33.5) | — | 29,212 (66.5) | — | 43,908 | — |
| 2005 | 16,069 (34.5) | 9.3 | 30,458 (65.5) | 4.3 | 46,527 | 6.0 |
| 2006 ^b | 17,397 (35.8) | 8.3 | 31,195 (64.2) | 2.4 | 48,592 | 4.4 |
| 2007 | 18,735 (37.0) | 7.7 | 31,956 (63.0) | 2.4 | 50,691 | 4.3 |
| 2008 | 19,896 (37.8) | 6.2 | 32,744 (62.2) | 2.5 | 52,685 | 3.9 |
| 2009 | 21,158 (38.7) | 6.3 | 33,552 (61.3) | 2.5 | 54,710 | 3.8 |
| 2010 | 22,194 (39.0) | 4.9 | 34,647 (61.0) | 3.3 | 56,841 | 3.9 |
| 2011 | 23,100 (39.2) | 4.1 | 35,815 (60.8) | 3.4 | 58,915 | 3.6 |
| 2012 | 23,900 (39.0) | 3.5 | 37,375 (61.0) | 4.4 | 61,275 | 4.0 |
| 2013 | 24,326 (38.8) | 1.8 | 38,417 (61.2) | 2.8 | 62,743 | 2.4 |
| 2014 | 24,655 (38.6) | 1.4 | 39,272 (61.4) | 2.2 | 63,927 | 1.9 |
| 2015 | 24,476 (38.6) | -0.7 | 38,984 (61.4) | -0.7 | 63,460 | -0.7 |
| 2016 | 24,174 (38.1) | -1.2 | 39,278 (61.9) | 0.8 | 63,464 | 0.0 |

^aNot able to calculate percent change due to change in how data is reported by select institutions

^bIncludes only Pharm.D.1 degrees beginning in 2006

Table 15. Summary of Enrollments in First Professional Degree Programs by Race/Ethnicity 1980-2016

| Year | Black or African American ^a | Hispanic or Latino ^a | % Change From Previous Year | Asian ^a | % Change From Previous Year | Native Hawaiian or Other Pacific Islander ^a | % Change From Previous Year | American Indian or Alaska Native ^a | % Change From Previous Year | Two or More Races ^a | % Change From Previous Year |
|-------------------|--|---------------------------------|-----------------------------|--------------------|-----------------------------|--|-----------------------------|---|-----------------------------|--------------------------------|-----------------------------|
| 1980 ^b | 945 | 934 | | 1,035 | | NA | | 36 | | NA | |
| 1981 ^b | 932 | 787 | -15.7 | 1,040 | 0.5 | NA | NA | 38 | 5.6 | NA | NA |
| 1982 ^b | 935 | 784 | -0.4 | 1,072 | 3.1 | NA | NA | 36 | -5.6 | NA | NA |
| 1983 ^b | 1,019 | 787 | 0.4 | 922 | -14.0 | NA | NA | 42 | 16.7 | NA | NA |
| 1984 ^b | 1,098 | 763 | -3.0 | 1,086 | 17.8 | NA | NA | 37 | -11.9 | NA | NA |
| 1985 | 1,664 | 927 | NA | 1,410 | NA | NA | NA | 42 | NA | NA | NA |
| 1986 | 1,647 | 1,018 | 9.8 | 1,740 | 23.4 | NA | NA | 39 | -7.1 | NA | NA |
| 1987 | 1,729 | 1,055 | 3.6 | 2,000 | 14.9 | NA | NA | 45 | 15.4 | NA | NA |
| 1988 | 1,891 | 1,089 | 3.2 | 2,362 | 18.1 | NA | NA | 78 | 73.3 | NA | NA |
| 1989 | 1,983 | 1,096 | 0.6 | 2,706 | 14.6 | NA | NA | 81 | 3.8 | NA | NA |
| 1990 | 2,103 | 1,118 | 2.0 | 3,346 | 23.7 | NA | NA | 85 | 4.9 | NA | NA |
| 1991 | 2,395 | 1,055 | -5.6 | 3,540 | 5.8 | NA | NA | 98 | 15.3 | NA | NA |
| 1992 | 2,340 | 1,088 | 3.1 | 4,135 | 16.8 | NA | NA | 96 | -2.0 | NA | NA |
| 1993 | 2,380 | 1,143 | 5.1 | 4,731 | 14.4 | NA | NA | 128 | 33.3 | NA | NA |
| 1994 | 2,582 | 1,171 | 2.4 | 5,408 | 14.3 | NA | NA | 128 | 0.0 | NA | NA |
| 1995 | 2,548 | 1,150 | -1.8 | 5,695 | 5.3 | NA | NA | 151 | 18.0 | NA | NA |
| 1996 | 2,529 | 1,140 | -0.9 | 6,152 | 8.0 | NA | NA | 147 | -2.6 | NA | NA |
| 1997 | 2,632 | 1,130 | -0.9 | 6,451 | 4.9 | NA | NA | 150 | 2.0 | NA | NA |
| 1998 | 2,757 | 1,157 | 2.4 | 6,741 | 4.5 | NA | NA | 160 | 6.7 | NA | NA |
| 1999 | 2,697 | 1,086 | -6.1 | 6,414 | -4.9 | NA | NA | 156 | -2.5 | NA | NA |
| 2000 | 3,132 | 1,255 | 15.6 | 7,392 | 15.2 | NA | NA | 137 | -12.2 | NA | NA |
| 2001 | 3,407 | 1,322 | 5.3 | 7,405 | 0.2 | NA | NA | 179 | 30.7 | NA | NA |
| 2002 | 3,826 | 1,466 | 10.9 | 8,263 | 11.6 | NA | NA | 168 | -6.1 | NA | NA |
| 2003 | 4,183 | 1,605 | 9.5 | 8,991 | 8.8 | NA | NA | 191 | 13.7 | NA | NA |
| 2004 ^c | 3,784 | 1,691 | — | 9,103 | — | NA | NA | 210 | — | NA | NA |
| 2005 | 3,703 | 1,778 | 5.1 | 9,690 | 6.1 | NA | NA | 234 | 11.4 | NA | NA |
| 2006 ^d | 3,275 | 1,888 | 6.2 | 10,312 | 6.4 | NA | NA | 220 | -6.0 | NA | NA |
| 2007 | 3,229 | 2,044 | 8.3 | 10,974 | 6.4 | NA | NA | 248 | 12.7 | NA | NA |
| 2008 | 3,395 | 2,186 | 6.9 | 11,638 | 6.1 | NA | NA | 263 | 6.0 | NA | NA |
| 2009 | 3,581 | 2,278 | 4.2 | 12,497 | 7.4 | NA | NA | 264 | 0.4 | NA | NA |
| 2010 | 3,711 | 2,369 | 4.0 | 13,666 | 9.4 | NA | NA | 259 | -1.9 | NA | NA |

(Continued)

Table 15. (Continued)

| Year | Black or African American ^a | % Change From Previous Year | Hispanic or Latino ^a | % Change From Previous Year | Asian ^a | % Change From Previous Year | Native Hawaiian or Other Pacific Islander ^a | % Change From Previous Year | American Indian or Alaska Native ^a | % Change From Previous Year | Two or More Races ^a | % Change From Previous Year |
|-------------------|--|-----------------------------|---------------------------------|-----------------------------|--------------------|-----------------------------|--|-----------------------------|---|-----------------------------|--------------------------------|-----------------------------|
| 2011 ^c | 3,964 | — | 2,317 | — | 14,124 | — | 264 | — | 205 | — | 629 | — |
| 2012 | 4,226 | 6.6 | 2,537 | 9.5 | 14,441 | 2.2 | 594 | 125.0 | 238 | 16.1 | 968 | 53.9 |
| 2013 | 4,376 | 3.5 | 2,681 | 5.7 | 15,438 | 6.9 | 203 | -65.8 | 222 | -6.7 | 1,172 | 21.1 |
| 2014 | 4,690 | 7.2 | 2,907 | 8.4 | 15,955 | 3.3 | 152 | -25.1 | 205 | -7.7 | 1,370 | 16.9 |
| 2015 | 5,031 | 7.3 | 3,185 | 9.6 | 16,073 | 0.7 | 231 | 52.0 | 194 | -5.4 | 1,491 | 8.8 |
| 2016 | 5,308 | 5.5 | 3,391 | 6.5 | 15,838 | -1.5 | 235 | 1.7 | 192 | -1.0 | 1,531 | 2.7 |

^aU.S. citizen or permanent resident

^bTotals for 1980-1984 are for enrollments in final three years of program only

^cNot able to calculate percent change due to change in how data are reported

^dIncludes B.S. Pharmacy, B.Pharm., and Pharm.D.1 from 1980-2005. Includes only Pharm.D.1 beginning in 2006

Table 16. Summary of Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) Fall 2016 Full-Time Enrollments by Gender and Discipline

| Discipline | M.S. Degree | | | | Ph.D. Degree | | | |
|------------------------------------|-------------|-----|-------|-------------------------------------|--------------|-------|-------|--------------------------------------|
| | M | F | T | Percent of M.S. Program Enrollments | M | F | T | Percent of Ph.D. Program Enrollments |
| | | | | | | | | |
| Medicinal Chemistry | 42 | 37 | 79 | 6.4 | 433 | 311 | 744 | 22.2 |
| Pharmacology | 66 | 108 | 174 | 14.0 | 269 | 307 | 576 | 17.2 |
| Social and Administrative Sciences | 108 | 151 | 259 | 20.9 | 167 | 195 | 362 | 10.8 |
| Pharmacy Practice | 47 | 84 | 131 | 10.6 | 63 | 86 | 149 | 4.4 |
| Pharmaceutics | 176 | 274 | 450 | 36.3 | 648 | 578 | 1,226 | 36.6 |
| Other ^a | 49 | 99 | 148 | 11.9 | 158 | 135 | 293 | 8.7 |
| Total | 488 | 753 | 1,241 | | 1,738 | 1,612 | 3,350 | |

^aIncludes RSCI, MDD, HCDA, immunology, pharmaceutical affairs, pharmaceutical nanotechnology, pharmaceutical & biomedical sciences, clinical psychopharmacology, undecided, pharmacogenomics, drug design & discovery, biomedical nanotechnology, biomolecular science, and pharmacotherapeutics for M.S. programs and bioengineering/biophysics/biological & medical informatics, DRSc, clinical pharmaceutical sciences, pharmacogenetics, pharmaceutical & biomedical science, drug design & discovery, undecided, biomolecular science, and translational science for Ph.D. programs

Table 17. Fall 2016 Enrollments in Ph.D. Programs by Type of Enrollment (Full-Time, Part-Time), Discipline, and Source of Previous Degree Earned^a

| | U.S. School | | Canadian School | | Foreign School | | All Schools | |
|----------------------------|-------------|-----------|-----------------|-----------|----------------|-----------|-------------|-----------|
| | Pharm | Non-pharm | Pharm | Non-pharm | Pharm | Non-pharm | Pharm | Non-pharm |
| Full-time | | | | | | | | |
| Medicinal Chemistry | 36 | 366 | 0 | 0 | 137 | 132 | 173 | 498 |
| Pharmacology | 44 | 226 | 1 | 1 | 176 | 97 | 221 | 324 |
| Social and Admin. Sciences | 50 | 93 | 2 | 0 | 126 | 54 | 178 | 147 |
| Pharmacy Practice | 25 | 40 | 0 | 0 | 44 | 36 | 69 | 76 |
| Pharmaceutics | 121 | 340 | 0 | 1 | 390 | 250 | 511 | 591 |
| Other | 7 | 59 | 0 | 1 | 22 | 39 | 29 | 99 |
| Total full-time | 283 | 1,124 | 3 | 3 | 895 | 608 | 1,181 | 1,735 |
| Part-time | | | | | | | | |
| Medicinal Chemistry | 2 | 1 | 0 | 0 | 4 | 0 | 6 | 1 |
| Pharmacology | 1 | 16 | 0 | 0 | 10 | 2 | 11 | 18 |
| Social and Admin. Sciences | 4 | 10 | 0 | 0 | 4 | 2 | 8 | 12 |
| Pharmacy Practice | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pharmaceutics | 3 | 11 | 0 | 0 | 16 | 4 | 19 | 15 |
| Other | 0 | 16 | 0 | 2 | 2 | 0 | 2 | 18 |
| Total part-time | 10 | 54 | 0 | 2 | 36 | 8 | 46 | 64 |

^aIncludes only those students for whom source of degree was reported

ACKNOWLEDGMENTS

The American Association of Colleges of Pharmacy wishes to express its appreciation to the deans of its member institutions and members of their faculty and staff who

devoted their valuable time to complete the surveys that led to this report.

This report is an excerpt from the *Profile of Pharmacy Students – Fall 2016*, published by the American Association of Colleges of Pharmacy (2017).