PROFILE OF PHARMACY STUDENTS
Fall 2014

2013–14 Application Pool

Degrees Conferred 2013–14
• professional degrees
• graduate degrees

Fall 2014 Enrollments
• professional degrees
• graduate degrees

The AACP institutional research data-gathering and analysis system has been designed to collect and report information related to the U.S. pharmacy colleges and schools including more than 6,600 faculty, 64,800 students enrolled in professional programs, and 4,900 individuals pursuing graduate study. The system can efficiently provide information to characterize the pharmacy education enterprise and its constituents, to study trends, and to assist pharmacy college and school administrators, organizations in higher education, and the government in decision making with regard to pharmacy and health education. For additional information regarding the AACP’s Office of Institutional Research and Effectiveness, contact the Association’s Director of Institutional Research and Effectiveness.
INTRODUCTION

The annual Profile of Pharmacy Students provides data on applications to first professional degree programs and degrees conferred and student enrollment in professional and graduate degree programs at the 133 U.S. colleges and schools of pharmacy with accredited (full, candidate and precandidate status) professional degree programs as of fall 2014. This Profile presents data describing:

- the pharmacy application pool for 2013–14 (i.e., applications for admission in fall 2014);
- degrees conferred data 2013–14 and related long-term trends; and
- student enrollments for fall 2014 and related long-term trends.

In this report:

- Pharm.D.1 refers to the doctor of pharmacy degree awarded as the first professional degree.
- Pharm.D.2 refers to a postbaccalaureate degree.
- First professional degrees refer to the total of baccalaureates (B.S. in pharmacy, B.Pharm.) plus Pharm.D.1 degrees.
- White refers to 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.
- 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/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.
- International/Foreign refers to citizens of a foreign country/permanent residents of a country other than the U.S.

June 30, 2005 marked the official expiration of the ACPE standards for baccalaureate in pharmacy (B.S. Pharmacy) degree programs, in accordance with the transition to the Doctor of Pharmacy (Pharm.D.) as the sole accredited professional degree program in the United States. Some colleges/schools of pharmacy conferred degrees in the B.S. Pharmacy program until 2004-05. For longitudinal and school-specific tables regarding this degree program please contact the Association’s Director of Institutional Research and Effectiveness.

METHODS

The data in this Profile were gathered using five separate online survey instruments in October 2014. Submission of data was requested by December 12, 2014.

The 2013–14 Application Pool Survey requested information on applicants who applied for admission, and submitted all required application materials during the academic year September 2013 to August 2014 for the class entering fall 2014. One hundred and thirty-one (98.5 percent response) submitted data. Numbers reported represent the number of applications, not applicants, and may represent multiple applications submitted by individual applicants.

The Undergraduate and Professional Pharmacy Degrees Conferred Survey 2013–14 and the Graduate Pharmacy Degrees Conferred Survey 2013–14 were completed by one hundred and thirty-two institutions (99.2 percent response).

The Enrollment Survey—Fall 2014 Professional Pharmacy Degree Programs and the Enrollment Survey—Fall 2014 Graduate Degree Programs in the Pharmaceutical Sciences were completed by one hundred and thirty-two institutions (99.2 percent response).

ACKNOWLEDGMENT

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 completed the surveys. The nearly 100% percent return for all of the surveys is testimony to the institutions’ commitment to the goals of this report.

Danielle A. Taylor, M.P.P.
Director of Institutional Research and Effectiveness

Jamie Taylor, B.A.
Research Analyst

Nancy T. Nguyen, B.A.
Academic Research and Program Assistant
HIGHLIGHTS
In 2013–14, there were 85,754 applications submitted to first professional degree programs at schools and colleges of pharmacy.

The number of Pharm.D. as a first professional degrees awarded increased to 13,838 in 2014 compared to 13,207 in 2013. This is the largest number of degrees conferred in the history of pharmacy education.

The attrition rate for the class of 2014 was 10.3%. The attrition rate includes academic dismissals, student withdrawals, and delayed graduations.

Enrollments in all professional years rose 2.1 percent. The number of first professional year enrollments increased 1.9 percent.

The number of Pharm.D. degrees conferred to individuals already holding a professional baccalaureate in pharmacy decreased slightly to 339 in 2014 compared to 344 in 2013. The number of individuals enrolled in postbaccalaureate Pharm.D. programs decreased to 935 from 1,118 enrolled in fall 2013.

The number of M.S. degrees conferred increased 18.3 percent in 2013-14 and the number of Ph.D. degrees conferred decreased 4.1 percent.

SUMMARY

2013-14 APPLICATION POOL

- From September 2013 through August 2014, one hundred and thirty-one (131) colleges and schools reported receiving 85,754 applications to the Doctor of Pharmacy (Pharm.D.) as the first professional degree programs.
- 5.5 applications were received by colleges and schools of pharmacy for every one entering student enrolled in fall 2014.
- The majority (59.3 percent) of the applications were submitted by females; 39.2 percent were submitted by males. The gender was not reported or unknown for 1.5 percent.
- Underrepresented minorities submitted 17.3 percent of the applications (black, 11.0 percent; Hispanic, 5.9 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian, 0.2 percent). Applications submitted from students that identify as two or more races totaled 2.5 percent.
- Nearly 76 percent (75.9 percent) of the applications to colleges and schools were submitted by individuals who had 3 or more years of postsecondary education: 10.7 percent had completed 3 or more years of postsecondary education without earning a degree; 61.2 percent held a baccalaureate; 3.0 percent held a master’s degree; and 1.0 percent held a doctoral degree.
- The majority (56.0 percent) of applications received by colleges and schools of pharmacy were submitted by out-of-state residents.

PROFESSIONAL (Pharm.D.) DEGREES CONFERRED 2013-14

- The total number of first professional degrees conferred (N=13,838) increased 4.8 percent from 2012–13.
- Women received 60.4 percent of the first professional degrees conferred; men received 39.6 percent.
- White Americans received the majority of Pharm.D.1 degrees (54.7 percent). Underrepresented minorities received 11.7 percent (black, 6.8 percent; Hispanic, 4.4 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian, 0.3 percent). Degree recipients that identified as two or more races received 1.3 percent of all Pharm.D.1 degrees. Asian Americans received 24.1 percent of the Pharm.D.1 degrees. The percentage of Pharm.D.1 degree recipients who were foreign, nonpermanent residents of the U.S. was 2.2 percent, which remained flat from 2012–13.
- The number of Pharm.D.2 degrees conferred (n=339) decreased by 1.5 percent from 2012–13.
- More women than men received Pharm.D.2 degrees: women, 67.6 percent; men, 32.4 percent.
- The percentage of Pharm.D.2 degree recipients who were foreign, nonpermanent residents of the U.S. was 10.0, down from 19.8 percent in 2012–13.
GRADUATE DEGREES (M.S. and Ph.D.) CONFERRED 2013–14

• The number of M.S. degrees (n=775) increased 18.3 percent from 2012–13.
• The number of Ph.D. degrees (n=565) decreased 4.1 percent from 2012–13.
• More women than men earned M.S. degrees (women, 56.1 percent; men, 43.9 percent) in 2013–14; however, more men earned Ph.D. degrees (women, 47.3 percent; men, 52.7 percent). There have only been two years (2008-09 and 2012–13) in which women earned more Ph.D. degrees than men.
• Underrepresented minorities received 7.2 percent of the M.S. degrees (black, 4.9 percent; Hispanic, 1.9 percent; Native Hawaiian or Other Pacific Islander, 0.4 percent; American Indian, 0.0 percent), up from 6.6 percent in 2012-13. Degree recipients that identified as two or more races received 0.6 percent of all M.S. degrees and Asian Americans received 9.7 percent of the M.S. degrees. The percentage of M.S. degree recipients who were foreign, nonpermanent residents of the U.S. was 49.8 percent, up slightly from 48.7 percent in 2012-13.
• By discipline, the most M.S. degrees conferred were in pharmaceutics (34.2 percent). The next highest percentage was in social and administrative sciences (20.4 percent), followed by pharmacology (17.7 percent), other discipline (12.3 percent), medicinal chemistry (8.3 percent), and pharmacy practice (7.2 percent).

FALL 2014 ENROLLMENTS

• 63,927 students were enrolled in the Doctor of Pharmacy (Pharm.D.1) as the first professional degree programs.
• There was a 2.1 percent increase from fall 2013 in enrollments in the professional years (includes four years for Pharm.D.) of the Pharm.D.1 degree program.
• Underrepresented minorities accounted for 12.4 percent of Pharm.D.1 degree enrollments (black, 7.3 percent; Hispanic, 4.5 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian 0.3 percent) in fall 2013. Students that identified as two or more races accounted for 2.1 percent of all first professional degree enrollments.
• The number of Pharm.D.2 students enrolled (n=935) decreased by 16.4 percent from fall 2013.
• There were 60 students enrolled in traditional full-time Pharm.D.2 degree programs in fall 2014. There were an additional 875 students enrolled in nontraditional programs in fall 2014.
• At the M.S. and Ph.D. levels the greatest numbers of full-time students were enrolled in the discipline of pharmaceutics (36.2 percent and 35.4 percent, respectively).
• More females than males were enrolled full-time in M.S. programs, while more males than females were enrolled full-time in Ph.D. programs. Females accounted for 56.3 percent of full-time students in M.S. programs and 47.0 percent of full-time students in Ph.D. programs.
• The percentage of full-time M.S. students who were underrepresented minorities (black, 2.7 percent; Hispanic, 2.2 percent; Native Hawaiian or Other Pacific Islander, 0.6 percent; American Indian, 0.1 percent) increased from 5.0 percent in fall 2013 to 5.6 percent in fall 2014. 1.1 percent of all M.S. full-time enrollments were students that identified as two or more races.
• The percentage of full-time Ph.D. students who were underrepresented minorities (black, 3.8 percent; Hispanic, 2.3 percent; Native Hawaiian or Other Pacific Islander, 0.3 percent; American Indian, 0.3 percent) decreased from 7.7 percent in fall 2013 to 6.7 percent in fall 2014. 0.6 percent of all Ph.D. full-time enrollments were students that identified as two or more races.
### Tables

#### 2013–14 Application Pool

Table 1: Total Number of Applications to First Professional Degree Programs in 2013–14 ................................................ 11  
Table 2: By Gender and Race/Ethnicity of Applicant ........................................................................................................... 14  
Table 3: By Gender and State of Residency of Applicant ..................................................................................................... 14  
Table 4: By Gender and Previous Postsecondary Experience of Applicant ........................................................................... 14

#### Degrees Conferred

**Longitudinal**

Table 5: By Degree and Gender, 1965–2014 .......................................................................................................................... 15  
Table 6: Annual Percent Change in Number of Pharmacy Degrees Conferred 1984–2014 Over Previous Year ............................. 16  
Table 7: Percent of Pharmacy Degrees Conferred 1984–2014 by Gender .................................................................................. 17  
Table 8: Estimated Attrition Rates for First-Professional Degree Classes 1984–2014 .................................................................. 18  
Table 9: Progression Rates for First-Professional Degree Classes 2008–14 ............................................................................ 19

**Longitudinal by Gender and Race/Ethnicity, 1985–2014**

Table 10: Doctor of Pharmacy Degrees Conferred as First Professional Degrees (Pharm.D.1) .................................................. 20  
Table 11: Postbaccalaureate Doctor of Pharmacy Degrees (Pharm.D.2) .................................................................................... 22  
Table 12: Master of Science Degrees (M.S.) .......................................................................................................................... 24  
Table 13: Philosophy Degrees (Ph.D.) ................................................................................................................................. 26

**Longitudinal–Percent by Race/Ethnicity, 1985–2014**

Table 14: Doctor of Pharmacy Degrees Conferred as the First Professional Degree (Pharm.D.1) .................................................. 28  
Table 15: Postbaccalaureate Doctor of Pharmacy Degree (Pharm.D.2) ..................................................................................... 30  
Table 16: Percent of Master of Science Degree (M.S.) .............................................................................................................. 32  
Table 17: Philosophy Degree (Ph.D.) ...................................................................................................................................... 34

**Longitudinal by Residency/Citizenship, 1985–2014**

Table 18: Doctor of Pharmacy Degree Conferred as the First Professional Degree (Pharm.D.1) .................................................. 36  
Table 19: Postbaccalaureate Doctor of Pharmacy Degree (Pharm.D.2) ..................................................................................... 37  
Table 20: Master of Science Degree (M.S.) .......................................................................................................................... 38  
Table 21: Doctor of Philosophy Degree (Ph.D.) ....................................................................................................................... 39

**Summary of Degrees Conferred, 2013–14**

Table 22: By School, Degree, and Gender ............................................................................................................................ 40  
Table 23: By State, Degree, and Gender ................................................................................................................................ 43

**Degrees Conferred 2013–14 by School, Gender, and Race/Ethnicity**

Table 24: Doctor of Pharmacy Degrees Conferred as First Professional Degrees (Pharm.D.1) .................................................. 44  
Table 25: Postbaccalaureate Doctor of Pharmacy Degrees (Pharm.D.2) .................................................................................... 52  
Table 26: Master of Science (M.S.) ........................................................................................................................................ 54  
Table 27: Doctor of Philosophy Degrees (Ph.D.) ..................................................................................................................... 58

**Summary of Graduate Degrees Conferred, 2013–14**

Table 28: Degree, Gender, and Discipline .............................................................................................................................. 61
Master of Science Degrees (M.S.) Conferred 2013–14 by School, Gender, and Race/Ethnicity

Table 29: Medicinal Chemistry ................................................................. 62
Table 30: Pharmacology ......................................................................... 64
Table 31: Social and Administrative Sciences ......................................... 66
Table 32: Pharmacy Practice ................................................................... 68
Table 33: Pharmaceutics .......................................................................... 70
Table 34: Other Disciplines .................................................................... 72

Doctor of Philosophy Degrees (Ph.D.) Conferred 2013–14 by School, Gender, and Race/Ethnicity

Table 35: Medicinal Chemistry ................................................................. 74
Table 36: Pharmacology .......................................................................... 76
Table 37: Administrative Sciences .......................................................... 78
Table 38: Pharmacy Practice ................................................................... 80
Table 39: Pharmaceutics .......................................................................... 82
Table 40: Other Disciplines .................................................................... 86

Enrollments

Summary of Full-Time Enrollments Fall 2014

Table 41: By School, Degree, and Gender .................................................. 88

First Professional Degree Enrollments

Fall 2014 Enrollments by School, Gender, and Expected Graduation Year

Table 42: Doctor of Pharmacy as the First Professional Degree (Pharm.D.1) Programs ......................................................... 91
Longitudinal–Summary of Annual Changes in Enrollments 1982–2014

Table 43: First Professional Degree (Baccalaureate, Pharm.D.1) Programs ................................................................. 96
Change in Enrollments by School Fall 2013 to Fall 2014

Table 44: Doctor of Pharmacy as the First Professional Degree (Pharm.D.1) ................................................................. 97
Fall 2014 Enrollments by School, Gender, and Race/Ethnicity

Table 45: Doctor of Pharmacy as the First Professional Degree (Pharm.D.1) Programs ................................................................. 100

Minority Enrollments in First Professional Degree (Pharm.D.1) Programs

Table 46: By School, Fall 2014 ................................................................. 108
Table 47: Longitudinal, Fall 1988 to Fall 2014 ................................................. 111
Longitudinal–Enrollments in First Professional Degree (Baccalaureate, Pharm.D.1) Programs, 1985 to 2014

Table 48: Race/Ethnicity ............................................................................. 112
Table 49: By Gender .................................................................................. 113
Fall 2014 Enrollments in Doctor of Pharmacy as the First Professional Degree (Pharm.D.1) Programs

Table 50: By School and Residency ........................................................... 114
Table 51: By School and State of Residency ................................................. 118

Postbaccalaureate Doctor of Pharmacy Degree (Pharm.D.2) Enrollments

Fall 2014 Enrollments by School, Gender, and Expected Graduation Year

Table 52: Full-Time ..................................................................................... 124
Table 53: Nontraditional ............................................................................ 125
Fall 2014 Enrollments by School, Gender, and Race/Ethnicity
Table 54: Full-time, Traditional Part-time, and Nontraditional ................................................................. 126

Longitudinal
Table 55: By Type of Program and Gender Fall 1987 to Fall 2014 ................................................................. 128

Fall 2014 Enrollments by School, Type of Enrollment and Source of Baccalaureate
Table 56: Postbaccalaureate Doctor of Pharmacy Degree (Pharm.D,2) Programs ........................................... 129

Fall 2014 Enrollments by School and Residency
Table 57: Traditional Full-Time Enrollments ................................................................................................. 129
Table 58: Nontraditional .............................................................................................................................. 129

Graduate Degree Enrollments

Fall 2014 Full-Time Enrollments in Master of Science Degree (M.S.) Programs by School and Gender
Table 59: By Discipline ................................................................................................................................. 130
Table 60: By Race/Ethnicity .......................................................................................................................... 134
Table 61: Medicinal Chemistry, by Race/Ethnicity ......................................................................................... 138
Table 62: Pharmacology, by Race/Ethnicity .................................................................................................... 140
Table 63: Social and Administrative Sciences, by Race/Ethnicity ................................................................. 142
Table 64: Pharmacy Practice, by Race/Ethnicity ............................................................................................ 144
Table 65: Pharmaceutics by Race/Ethnicity ..................................................................................................... 146
Table 66: Other Disciplines, by Race/Ethnicity ............................................................................................. 148

Fall 2014 Full-Time Enrollments in Doctor of Philosophy Degree (Ph.D.) Programs by School and Gender
Table 67: By Discipline ................................................................................................................................. 150
Table 68: By Race/Ethnicity .......................................................................................................................... 154
Table 69: Medicinal Chemistry, by Race/Ethnicity ......................................................................................... 158
Table 70: Pharmacology, by Race/Ethnicity .................................................................................................... 162
Table 71: Social and Administrative Sciences, by Race/Ethnicity ................................................................. 166
Table 72: Pharmacy Practice, by Race/Ethnicity ............................................................................................ 168
Table 73: Pharmaceutics by Race/Ethnicity ..................................................................................................... 170
Table 74: Other Disciplines, by Race/Ethnicity ............................................................................................. 174

Fall 2014 Part-Time Enrollments by School, Gender, and Discipline
Table 75: Master of Science Degree (M.S.) Programs ..................................................................................... 176
Table 76: Doctor of Philosophy Degree (Ph.D.) Programs ............................................................................. 178

Fall 2014 Enrollments by Type of Enrollment (Full-Time, Part-Time), Discipline, and Source of Previous Degree Earned
Table 77: Master of Science Degree (M.S.) Programs ..................................................................................... 180
Table 78: Doctor of Philosophy Degree (Ph.D.) ............................................................................................. 181

Appendix A
Nonlicense-eligible Baccalaureates Conferred in the Pharmaceutical Sciences 2013–14
Table A-1: By School, Gender, and Race/Ethnicity ..................................................................................... 184

Appendix B
Fall 2014 Participation in Postgraduate Training Programs
Table B-1: By School, Type of Training Program, and Gender ...................................................................... 188
Fall 2014 Participation by School, Gender, and Race/Ethnicity

Table B-2: Fellowship Programs (Post-Ph.D. and Post-Pharm.D.) .................................................. 194
Table B-3: Residency Programs (PGY1 and PGY2) ........................................................................ 198
Table B-4: Post-Ph.D. Research Fellowship Programs .................................................................... 204
Table B-5: Post-Pharm.D. Research Fellowship Programs ............................................................. 208
Table B-6: Participation in PGY1-Pharmacy Residency Programs .................................................. 210
Table B-7: Participation in PGY1-Community Pharmacy Residency Programs ............................... 214
Table B-8: Participation in PGY1-Managed Care Pharmacy Residency Programs ......................... 218
Table B-9: Participation in PGY2 Residency Programs (all types) .................................................... 220