

# PROFILE OF PHARMACY STUDENTS

## Fall 2018

2017–18 Application Pool

Degrees Conferred 2017–18

- Professional degrees
- Graduate degrees

Fall 2018 Enrollments

- Professional degrees
- Graduate degrees

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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 6,800 faculty, 63,200 students enrolled in professional programs, and 6,000 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 about pharmacy and health education. For additional information contact AACP's Office of Institutional Research and Effectiveness.

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# PROFILE OF PHARMACY STUDENTS FALL 2018

## 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 143 U.S. colleges and schools of pharmacy with accredited (full, candidate and precandidate status) professional degree programs as of fall 2018. This *Profile* presents data describing:

- the pharmacy application pool for 2017–18 (i.e., applications for admission in fall 2018);
- degrees conferred data 2017–18 and related long-term trends; and
- student enrollments for fall 2018 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.

**Unknown/Other Gender** refers to individuals with unknown or other gender, regardless of race/ethnicity or citizenship

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 Office of Institutional Research & Effectiveness.

## METHODS

The data in this *Profile* were gathered using five separate online survey instruments in October 2018. Submission of data was requested by December 14, 2018.

The *2017–18 Application Pool Survey* requested information on applicants who applied for admission and submitted all required application materials between July 2017 to August 2018 for the class entering fall 2018. One hundred and forty-three institutions (100 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 2017–18* and the *Graduate Pharmacy Degrees Conferred Survey 2017–18* were completed by one hundred and forty-three institutions (100 percent response).

The *Enrollment Survey — Fall 2018 Professional Pharmacy Degree Programs* and the *Enrollment Survey — Fall 2018 Graduate Degree Programs in the Pharmaceutical Sciences* were completed by hundred and forty-three institutions (100 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 100% percent return for all the surveys is testimony to the institutions' commitment to the goals of this report.

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## HIGHLIGHTS

In 2017–18, there were 60,042 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 14,905 in 2018 compared to 14,502 in 2017. This is the largest number of degrees conferred in the history of pharmacy education.

The attrition rate for the class of 2018 was 12.1 percent, which remained flat from 2017. The attrition rate includes academic dismissals, student withdrawals, and delayed graduations.

Enrollments in all professional years decreased 1.3 percent and the number of first professional year enrollments decreased 3.3 percent.

The number of Pharm.D. degrees conferred to individuals already holding a professional baccalaureate in pharmacy decreased to 205 in 2018 compared to 217 in 2017. The number of individuals enrolled in postbaccalaureate Pharm.D. programs decreased to 764 in 2018 from 773 enrolled in fall 2017.

The number of M.S. degrees conferred increased 8.8 percent in 2017–18 and the number of Ph.D. degrees conferred increased 11.7 percent.

## SUMMARY

### 2017–18 APPLICATION POOL

- From September 2017 through August 2018, one hundred and forty-three (143) colleges and schools reported receiving 60,042 applications to the Doctor of Pharmacy (Pharm.D.1) as the first professional degree programs.
- The majority (61.2 percent) of the applications were submitted by females; 38.6 percent were submitted by males. The gender was not reported or unknown for 0.2 percent of applications.
- Underrepresented minorities submitted 21.1 percent of the applications (Black or African American, 12.6 percent; Hispanic or Latino, 8.2 percent; Native Hawaiian or Other Pacific Islander, 0.1 percent; American Indian or Alaska Native, 0.3 percent). 3.1 percent of applications were from applicants that identified as two or more races.
- Over seventy-five percent (75.1 percent) of the applications to colleges and schools were submitted by individuals who had three or more years of postsecondary education. The breakdown of applications by postsecondary education includes 33.2 percent by applicants that had completed three or more years of postsecondary education without earning a degree; 39.3 percent by applicants that held a baccalaureate; 2.2 percent by applicants that held a master's degree; and 0.5 percent by applicants that held a doctoral degree.
- Applications received by colleges and schools of pharmacy were equally submitted by in-state (50.4 percent) and out-of-state residents (49.6 percent).

### PROFESSIONAL (Pharm.D.) DEGREES CONFERRED 2017–18

- The total number of first professional degrees conferred (N=14,905) increased 2.8 percent from 2016-17
- Women received 62.0 percent of the first professional degrees conferred, men received 37.8 percent, and unknown/other gender received 0.1 percent of the first professional degrees conferred.
- White Americans received the majority of Pharm.D.1 degrees (50.6 percent). Underrepresented minorities received 14.1 percent (Black or African American, 8.3 percent; Hispanic or Latino, 5.4 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian or Alaska Native, 0.2 percent). Degree recipients that identified as two or more races received 2.4 percent of all Pharm.D.1 degrees. Asian Americans received 25.8 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 2.7 percent. 0.1 percent of recipients were of unknown/other gender regardless of race/ethnicity and citizenship.
- The number of Pharm.D.2 degrees conferred (n=205) decreased by 5.5 percent from 2016-17.
- The percentage of Pharm.D.2 degree recipients who were foreign, nonpermanent residents of the U.S. was 14.6, down from 15.2 percent in 2016–17.

## GRADUATE DEGREES (M.S. and Ph.D.) CONFERRED 2017–18

- The number of M.S. degrees (n=1,047) increased 8.8 percent from 2016–17.
- The number of Ph.D. degrees (n=600) increased 11.7 percent from 2016–17.
- More women than men earned M.S. degrees (women, 63.4 percent; men, 36.6 percent; unknown/other gender, 0.0 percent) in 2016-17; however, more men earned Ph.D. degrees (women, 49.0 percent; men, 51.0 percent; unknown/other gender, 0.0 percent). There have only been two years since AACP began collecting data (2008-09 and 2012-13) in which women earned more Ph.D. degrees than men.
- Underrepresented minorities received 11.1 percent of the M.S. degrees (Black or African American, 5.7 percent; Hispanic or Latino, 4.7 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian or Alaska Native, 0.5 percent), slightly down from 11.2 percent in 2016–17. Degree recipients that identified as two or more races received 1.1 percent of all M.S. degrees and Asian Americans received 10.9 percent of the M.S. degrees. The percentage of M.S. degree recipients who were foreign, nonpermanent residents of the U.S. was 38.9 percent, up from 30.2 percent in 2016-17. Students of unknown/other gender regardless of race/ethnicity or citizenship received 0.0 percent of all M.S. degrees conferred.
- By discipline, the most M.S. degrees conferred were in pharmaceuticals (31.6 percent). The next highest percentage was in social and administrative sciences (30.1 percent), followed by medicinal chemistry (15.6 percent), pharmacology (8.5 percent), other discipline (8.1 percent), and pharmacy practice (6.1 percent).
- Underrepresented minorities received 4.8 percent of the Ph.D. degrees (Black or African American, 3.5 percent; Hispanic or Latino, 1.2 percent; Native Hawaiian or Other Pacific islander; 0.0 percent; American Indian or Alaska Native, 0.2 percent), down from 5.2 percent in 2016-17. Degree recipients that identified as two or more races received 0.2 percent of all Ph.D. degrees conferred and Asian Americans received 7.7 percent. The percentage of Ph.D. degree recipients who were foreign, nonpermanent residents of the U.S. was 57.2, up slightly from 57.0 percent in 2016–17.
- By discipline, the most Ph.D. degrees conferred were in pharmaceuticals (38.5 percent). The next highest percentage was in medicinal chemistry (19.3 percent), followed by pharmacology (18.2 percent), social and administrative sciences (13.3 percent), other discipline (6.8 percent), and pharmacy practice (3.8 percent).

## FALL 2018 ENROLLMENTS

- 62,504 students were enrolled in the Doctor of Pharmacy (Pharm.D.1) as the first professional degree programs
- There was a 0.4 percent decrease in enrollments from fall 2017 in the professional years (includes four years for Pharm.D.) of the Pharm.D.1 degree program.
- Underrepresented minorities accounted for 16.2 percent of Pharm.D.1 degree enrollments (Black or African American, 9.1 percent; Hispanic or Latino, 6.5 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian or Alaska Native, 0.4 percent) in fall 2018. Students that identified as two or more races accounted for 3.2 percent of all first professional degree enrollments.
- The number of Pharm.D.2 students enrolled (n=764) decreased by 1.2 percent from fall 2017.
- There were 71 students enrolled in traditional full-time Pharm.D.2 degree programs in fall 2018. There were an additional 693 students enrolled in nontraditional programs in fall 2018.
- At the M.S. and Ph.D. levels the greatest numbers of full-time students were enrolled in the discipline of pharmaceuticals (47.2 percent and 40.2 percent, respectively).
- More females than males were enrolled full-time in M.S. programs as well as full-time in Ph.D. programs. Females accounted for 62.8 percent of full-time students in M.S. programs and 51.0 percent of full-time students in Ph.D. programs.
- The percentage of full-time M.S. students who were underrepresented minorities (Black or African American, 4.3 percent; Hispanic or Latino, 5.5 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian or Alaska Native, 0.5 percent) decreased from 11.2 percent in fall 2017 to 10.5 percent in fall 2018. 1.7 percent of all M.S. full-time enrollments were students that identified as two or more races. International/foreign students account for 49.9 percent of full-time M.S. enrollments as of fall 2018
- The percentage of full-time Ph.D. students who were underrepresented minorities (Black or African American, 4.5 percent; Hispanic or Latino, 3.6 percent; Native Hawaiian or Other Pacific Islander, 0.0 percent; American Indian or Alaska Native, 0.2 percent) increased from 7.6 percent in fall 2017 to 8.3 percent in fall 2018. 1.2 percent of all Ph.D. full-time enrollments were students that identified as two or more races. International/foreign students account for 49.9 percent of full-time Ph.D. enrollments as of fall 2018.

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