

PROFILE OF PHARMACY STUDENTS

Fall 2021

2020–21 Application Pool

Degrees Conferred 2020–21

- Professional degrees
- Graduate degrees

Fall 2021 Enrollments

- Professional degrees
- Graduate degrees

The AACP institutional research data-gathering and analysis system is designed to collect, and report information related to the U.S. pharmacy colleges and schools including more than 7,000 faculty, 53,000 students enrolled in professional programs, and 5,000 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 2021

INTRODUCTION

The annual *Profile of Pharmacy Students* provides data on applications to first professional degree programs, student enrollment, and degrees conferred in professional and graduate degree programs at U.S. colleges and schools of pharmacy. This *Profile* presents data describing:

- the pharmacy application pool for 2020–21 (i.e., applications for admission in fall 2021);
- degrees conferred for 2020–21 and related long-term trends; and
- student enrollments for fall 2021 and related long-term trends.

As of fall 2021 there were 142 U.S. colleges and schools of pharmacy with accredited (full, candidate and precandidate status) professional degree programs. See the Methods section for the total number of schools reporting data for each category.

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 2021. Submission of data was requested by December 10, 2021.

The *2020–21 Application Pool Survey* requested information on applicants who applied for admission and submitted all required application materials during the academic year September 2020 to August 2021 for the class entering fall 2021. One hundred and forty institutions (98.6 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 2020–21* and the *Graduate Pharmacy Degrees Conferred Survey 2020–21* were completed by one hundred and forty institutions (98.6 percent response).

The *Enrollment Survey — Fall 2021 Professional Pharmacy Degree Programs* and the *Enrollment Survey — Fall 2021 Graduate Degree Programs in the Pharmaceutical Sciences* were completed by one hundred and forty institutions (98.6 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 the surveys is testimony to the institutions' commitment to the goals of this report.

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HIGHLIGHTS

In 2020–21, there were 40,552 applications submitted to first professional degree programs at schools and colleges of pharmacy.

A total of 53,516 students were enrolled in the Doctor of Pharmacy (Pharm.D.1) as the first professional degree programs.

The number of Pharm.D. as a first professional degrees awarded decreased to 14,223 in 2021 compared to 14,320 in 2020.

The attrition rate for the class of 2021 increased to 13.1 percent compared to 12.5 percent in 2020. The attrition rate includes academic dismissals, student withdrawals, and delayed graduations.

The number of Pharm.D. degrees conferred to individuals already holding a professional baccalaureate in pharmacy increased to 186 from 175 in 2020. The number of individuals enrolled in postbaccalaureate Pharm.D. programs decreased to 582 from 640 in fall 2020.

The number of M.S. degrees increased to 1,403 from 1,130 in 2019–20 and the number of Ph.D. degrees conferred (n= 595) increased 12.5 percent from 2019–20.

SUMMARY

2020–21 APPLICATION POOL

From September 2020 through August 2021, one hundred and forty (140) colleges and schools reported receiving 40,552 applications to the Doctor of Pharmacy (Pharm.D.1) as the first professional degree programs.

- The majority (65.6 percent) of the applications were submitted by women; 34.3 percent were submitted by men. The gender was not reported or unknown for 0.1 percent of applications.
- Underrepresented minorities submitted 25.5 percent of the applications (Black or African American, 13.5 percent; Hispanic or Latino, 11.5 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian or Alaska Native, 0.3 percent). Over 3 percent (3.5) of applications were from applicants that identified as two or more races.
- Majority of the applications (69 percent) to colleges and schools were submitted by individuals who had three or more years of college (32.2 percent) or a baccalaureate degree (36.8 percent).
- Applications received by colleges and schools of pharmacy were almost equally submitted by in-state (52.4 percent) and out-of-state residents (47.6 percent).

PROFESSIONAL (Pharm.D.) DEGREES CONFERRED 2020–21

The total number of first professional degrees conferred (N=14,223) decreased 0.7 percent from 2019–20.

- Women received 63.7 percent of the first professional degrees conferred, men received 36.2 percent, and unknown/other gender received 0.1 percent of first professional degrees conferred.
- White Americans received the majority of Pharm.D.1 degrees (49.1 percent) followed by Asian Americans who received 25.4 percent of the Pharm.D.1 degrees. Underrepresented minorities accounted for 16.2 percent (Black or African American, 8.4 percent; Hispanic or Latino, 7.3 percent; Native Hawaiian or Other Pacific Islander, 0.1 percent; American Indian or Alaska Native, 0.4 percent) of all Pharm.D.1 degrees conferred in 2019–20. Degree recipients that identified as two or more races received 3.4 percent of all Pharm.D.1 degrees and foreign, nonpermanent residents of the U.S. made up 3.0 percent. Almost four percent (3.8) of degree recipients were reported with unknown race/ethnicity (Unknown race/ethnicity, 3.7%; Unknown/Other Gender regardless of race/ethnicity or citizenship, 0.1%)

The number of Pharm.D.2 degrees conferred (n=186) increased by 6.3 percent from 2019–20.

- More women than men received Pharm.D.2 degrees: women, 61.3 percent; men, 38.7 percent.
- The percentage of Pharm.D.2 degree recipients who were foreign, nonpermanent residents of the U.S. was 15.6, down from 18.3 percent in 2019–20.

GRADUATE DEGREES (M.S. and Ph.D.) CONFERRED 2020–21

The number of M.S. degrees (n=1,403) increased 24.2 percent from 2019–20. The number of Ph.D. degrees (n= 595) increased 12.5 percent from 2019–20.

- More women than men earned M.S. degrees (women, 68.6 percent; men, 30.8 percent; unknown/other gender, 0.6 percent) in 2020–21; and more women than men earned Ph.D. degrees (women, 52.1 percent; men, 47.9 percent; unknown/other gender, 0.0 percent) in 2020–21. There have only been three years since AACCP began collecting data (2008–09, 2012–13, and 2020–21) in which women earned more Ph.D. degrees than men.
- Underrepresented minorities received 12.8 percent of the M.S. degrees (Black or African American, 7.0 percent; Hispanic or Latino, 5.1 percent; Native Hawaiian or Other Pacific Islander, 0.1 percent; American Indian or Alaska Native, 0.6 percent), remaining flat from 12.8 percent in 2019–20. Degree recipients that identified as two or more races received 2.0 percent of all M.S. degrees. Most M.S. degrees were received by White Americans (39.2 percent) and individuals who are foreign, nonpermanent residents of the U.S. (30.9 percent). Asian Americans received 11.6 percent of the M.S. degrees. Students of unknown race/ethnicity represent 3.4 percent of M.S. degrees conferred (Unknown race/ethnicity, 2.8 percent; Unknown/Other Gender regardless of race/ethnicity or citizenship, 0.6 percent).
- By discipline, the most M.S. degrees conferred were in social and administrative sciences (38.1 percent). The next highest percentage was in pharmaceuticals (20.0 percent), followed by other disciplines (15.3 percent), medicinal chemistry (14.0 percent), pharmacology (6.3 percent), and, pharmacy practice (6.2 percent).
- Underrepresented minorities received 7.0 percent of the Ph.D. degrees (Black or African American, 3.5 percent; Hispanic or Latino, 3.2 percent; Native Hawaiian or Other Pacific islander, 0.3 percent; American Indian or Alaska Native, 0.0 percent), remaining flat from 7.0 percent in 2019–20. Degree recipients that identified as two or more races received 1.0 percent of all Ph.D. degrees conferred and Asian Americans received 8.2 percent. The percentage of Ph.D. degree recipients who were foreign, nonpermanent residents of the U.S. remains a majority at 52.1 percent.
- By discipline, the most Ph.D. degrees conferred were in pharmaceuticals (41.3 percent). The next highest percentage was in medicinal chemistry (19.0 percent), followed by pharmacology (16.3 percent), social and administrative sciences (10.9 percent), pharmacy practice (6.4 percent), and other disciplines (6.1 percent).

FALL 2021 ENROLLMENTS

A total of 53,516 students were enrolled in the Doctor of Pharmacy (Pharm.D.1) as the first professional degree programs.

- Enrollments in all professional years decreased 6.7 percent and the number of first professional year enrollments decreased 5.4 percent. While lower overall enrollment in post-secondary education contributes to these decreases, some of the decrease can also be attributed to two colleges and schools that opted not to report fall 2021 enrollments.
- Underrepresented minorities accounted for 19.7 percent of Pharm.D.1 degree enrollments (Black or African American, 10.2 percent; Hispanic or Latino, 8.9 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian or Alaska Native, 0.4 percent) in fall 2021. Students that identified as two or more races accounted for 3.3 percent of all first professional degree enrollments.

The number of Pharm.D.2 students enrolled (n=582) decreased by 9.1 percent from fall 2020.

- There were 232 students enrolled in traditional full-time Pharm.D.2 degree programs as of fall 2021. There were an additional 350 students enrolled in nontraditional programs as of fall 2021.

As of fall 2021, 1,670 students were enrolled in M.S. programs and 3,275 students were enrolled in Ph.D. programs.

- In M.S. degree programs, the greatest numbers of full-time students were enrolled in pharmaceuticals (34.1 percent). At the Ph.D. level, most full-time students were enrolled in the discipline of pharmaceuticals (37.4 percent).
- More females than males were enrolled full-time in both M.S. and Ph.D. programs. Females accounted for 65.9 percent of full-time students in M.S. programs and 54.8 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, 5.9 percent; Hispanic or Latino, 6.8 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian or Alaska Native, 0.2 percent) decreased to 13.1 percent from 13.2 percent in fall 2020. Over 1 percent (1.1 percent) of all M.S. full-time enrollments were students that identified as two or more races. International/foreign students still account for the majority of full-time M.S. enrollments (40.1 percent) remaining flat from 40.1 percent in fall 2020.
- The percentage of full-time Ph.D. students who were underrepresented minorities (Black or African American, 4.2 percent; Hispanic or Latino, 4.7 percent; Native Hawaiian or Other Pacific Islander, 0.2 percent; American Indian or Alaska Native, 0.2 percent) decreased to 9.3 percent from 9.6 percent in fall 2020. Three percent (3.0) of all Ph.D. full-time enrollments were students that identified as two or more races. International/foreign students also account for most full-time Ph.D. enrollments at 47.2 as of fall 2021.