RESEARCH

WOMEN CEO Deans of United States Colleges and Schools of Pharmacy

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Objective. Seventy-four women have served as chief executive officer (CEO) deans of US colleges and schools of pharmacy from 1988-December 31, 2020. This article examines the characteristics of those women with the objective of providing information useful for preparing future women deans.

Methods. Public domain resources were employed to obtain information about women pharmacy CEO deans including institutions where individuals served or are serving, dates of service, academic background, whether they were a founding dean, racial and ethnic diversity, and if they served or are serving in other academic higher education positions. Descriptive statistics (means, medians, standard deviations, and percentages) were used for data comparisons (quantitative research). Three early women CEO deans provide perspectives about their deanships in the Appendix (qualitative research).

Results and Discussion. The median length of service is 6 years for current women deans and 8 years for women who have completed deanships. The percentage of deans holding a PhD has declined to 32.4% with a concurrent rise in deans having a PharmD (58.8%); 79.4% of current deans and 77% of all 74 deans have a professional pharmacy degree (BSP Pharm, PharmD or both). Women have served or are currently serving as CEO deans at a wide variety of pharmacy schools. The percentage of schools with women deans has declined in recent years to 24%. Possible explanations for this decline are explored.

Conclusion. Recommendations are put forward to prepare future women deans including increased mentoring and creation of an advanced leadership program aimed at potential deans.

Keywords: CEO pharmacy deans, mentoring, women

INTRODUCTION

Women are not new to the pharmacy profession. Philadelphia College of Pharmacy, the first US school of pharmacy, celebrated its 200th anniversary in 2020, and before 1890 there were 23 schools founded with a total enrollment of nine female students as noted in Appendix 1 of Metta Lou Henderson's book *American Women Pharmacists*.¹ The first graduated in 1863 from the New York College of Pharmacy (merged with Columbia).^{1,2} As new schools were founded around the turn into the 20th century, there were even more female students enrolled. However, the numbers and percentages were small. Women were not considered by some as suitable for community practice because they were thought to lack the physical stamina and ability to put in 16-hour days required of community pharmacists. One should note that, in fact, there were women who became community pharmacists, both as owners and as partners with their spouses. Many went into hospital pharmacy, which at the time, paid less than community practice, but gave women a chance to develop into pharmacy leaders. Henderson also describes the role women played in the profession and highlights individual women who held important leadership roles.¹ Appendix 1 of her book lists the first women graduates for each school through 1950.

The relatively small number of women in pharmacy continued into the 1970s, except during World War II when women constituted a larger proportion of pharmacy students. In 1957, women were about 6.4% of the pharmacist workforce.³ In the late 1970s, however, the combination of changing societal attitudes about women preparing for careers and "capitation" legislation (ie, 1971 Comprehensive Health Manpower Training Act and the 1976 Health Professions Educational Assistance Act) greatly expanded class sizes; the percentage of pharmacy classes filled by women grew dramatically. The tipping point nationally occurred in 1985 when 52% of entering students were female, and that number

quickly rose to proportions that have continued to the present (2020 figures report 63% of pharmacy students are women) although individual schools may have varying percentages.⁴

With a greater influx of women than men into the profession, it was inevitable that eventually women would predominate in the workforce. This occurred in 2011, when data showed that slightly greater than 50% of pharmacists were women.⁵ As this change was happening, alarms were raised about whether the higher percentage of women would result in workforce shortages as women worked part-time or stepped out of the workforce to raise children. This did not happen as workforce data show that women work almost the same full-time equivalency as men, especially over a lifetime. Quinones and Mason showed that women were not leaving the profession at a rate that differed from men.⁶ There was also fear that the profession would lack leaders because women would hesitate to assume managerial and leadership roles.⁷ This fear was also shown to be unfounded by 2014 data, which showed that the majority of pharmacists in management positions were women.⁸

As the gender of the student body changed, so did that of the faculty, but with a lag as females sought credentials to become faculty members. Henderson documents the first women faculty members in each school from the early 1880s (University of Michigan) to 1978 (Washington State University). Data show that percentages of faculty members who are women have grown from 4.8% of full-time faculty in 1972-73, to 26% in 1992-93, to 51.2% in 2019-20.⁹⁻¹¹ In 2018-19, 57.3% of first-time faculty were female with 40.6% holding a PhD and 50.8% holding a PharmD.¹²

Academic leadership at the CEO deanship level broke the glass ceiling in 1988 as Adelaide Van Titus became the first woman dean of an accredited US pharmacy school (Temple University).^{*} The topic of women assuming the role of CEO dean deserves consideration, in that diversity brought by women deans brings better decision making, and women serve an important role in modeling leadership characteristics and aspirations for women students and faculty.^{13,14} Therefore, the authors decided to track women who have assumed CEO deanships in the past 32 years (through December 31, 2020) and observe various characteristics of their service.

METHODS

This article uses mixed research methods, looking at both quantitative and qualitative aspects. In all, the data collected represents all women CEO pharmacy deans from 1988-December 31, 2020.

Quantitative Research

Article preparation employed a variety of resources. An initial list of women CEO deans was organized using sources, which included *Historical Census of Deans of Pharmacy*, American Association of Colleges of Pharmacy (AACCP) information, Google®, Yahoo®, LinkedIn®, schools of pharmacy websites and Council of Deans minutes from various AACCP Annual Meetings.¹⁵⁻²¹ These were used to determine institutions where deans served or are serving along with dates of service, academic background, whether they were a founding dean, racial and ethnic diversity as well as titles, starting dates and places where some held or are holding other academic higher education positions. AACCP lists of CEO deans were employed at the end of our work to determine deans in place as of December 31, 2020.^{22,23} Information was compiled from public domain sources. After the collected information was organized in a spreadsheet (Table 1), it was sent to all current and former women CEO deans for their final verification. Information about degrees individuals possessed were collected using public domain data previously noted except for a few individuals who were contacted directly. Descriptive statistics (means, medians, standard deviations, and percentages) were calculated for data comparisons. While multiple efforts were taken for accuracy, doubtlessly some inadvertent errors may persist.

Qualitative Research

Three women from the first 12 CEO deans were interviewed to gain their perspectives about their careers (Appendix). Each woman was asked the same questions: How she prepared to become a dean, what were her accomplishments and challenges, and finally, what advice she would give to other women. Ilia Oquendo Jimenez was chosen because she was the second female dean, the first pharmacist dean and a basic scientist. Barbara Wells was chosen because she was the first female PharmD dean, and Arcelia Johnson-Fannin because she started two new pharmacy programs. All three deans approved the quotes selected; therefore, IRB approval was not sought.

RESULTS

Table 1 lists women CEO deans of accredited US schools of pharmacy chronologically with their academic service. Figure 1 shows the number of women CEO deans in any given year since the first one in 1988 and the percentage of pharmacy schools with women deans. The number climbed steadily until 2010 but leveled off (33 +/- 3). The number of accredited schools has continued to grow, thus, the percentage of schools with women deans has fallen to 24%. These figures account for permanent (not interim) CEO deans.

The length of service (to 0.5 year) as a CEO dean was determined for both women deans who were currently in office as of December 31, 2020 and those who had completed their deanships. For the 34 deans currently in office, the range of service was 0.5 to 16.5 years, the median length of service is 6 years, and the mean length of tenure is 6.6 years (SD 4.6 years). For the 40 deans who completed their service, the range of time in office was 1.5 to 21.5 years, the median length of service was 8 years and the mean tenure was 8.4 years (SD 5.6 years).

Academic Background

Many think it is important for leaders of professional schools such as pharmacy to have backgrounds in the profession to guide faculty in the education of students appropriately for future careers. Such a background can be obtained in many ways, but the most common is through completion of a professional degree. For this analysis and to see changes over time, women CEO deans were divided into three groups: Group A is comprised of the first 12 women deans (Table 2), Group B is the 34 current women deans (ie, deans serving on December 31, 2020; Table 3), and Group C is all 74 women deans (Table 1).

For Group A, 41.7% had a Doctor of Philosophy (PhD) degree as a terminal degree, 50% had a Doctor of Pharmacy (PharmD) degree, and one individual had a Doctor of Education (EdD) degree. Of those with PhDs, all had Bachelor of Science in Pharmacy (BSPharm) degrees. Five of those with PharmD degrees also had BSPharm degrees. The sixth individual had a PharmD from an institution that offered it as its only professional degree.

For Group B, the percentage of those with a PhD has declined compared to Group A (32.4% versus 41.7%) and is somewhat smaller than Group C (32.4% versus 36.5%). In Group B, one individual has both a PharmD and a PhD and three individuals in Group C have this combination of degrees. One hundred percent of deans with PhDs in Group A, but only 54.5% of Group B and 55.6% of Group C have BSPharm degrees. The percentage of Group B deans with a PharmD either alone or in combination with a BSPharm degree is 58.8%, and 79.4% have any professional pharmacy degree (BSPharm, PharmD or both). Of all 74 CEO deans, 77% have at least one professional pharmacy degree.

Other Findings

A review of the ethnicity of the first 12 women CEO deans shows that there were five deans of color including two African American, two Asian and one Latina. Racial and ethnic diversity data are unavailable for later deans. Two of the five served at historically black colleges and universities (HBCU). Currently there are seven HBCU in the United States that have a school of pharmacy. Five of the seven have had a woman dean, and seven women deans have served at those five schools.

Since 1998, 68 new schools have been founded, and ten were founded by women. One woman, Arcelia Johnson-Fannin, founded two different schools of pharmacy.

We addressed the number of women CEO deans who have expanded their leadership roles beyond pharmacy education into higher education administration. Listed in Table 4 are the titles and numbers of academic leadership positions women CEO deans have held or were holding as of December 31, 2020. Some have held more than one position.

Seventeen of the 74 women CEO deans (23%) account for the data in Table 4 with 9 of 17 (52.9%) holding or having held positions while serving as dean and 11 of 17 (64.7%) holding positions after leaving a deanship. (Three held positions during and after deanships.) Among the 34 current deans, 8.8% hold concurrent positions in higher education administration. Table 1 includes the positions individual deans have held or currently hold.

Research intensive schools for our purposes are defined as those with a Carnegie Classification rating of R1, R2 or a 4-year medical/academic health center plus > \$1 million in federal funding according to AACCP data for 2020.^{24,25} There are 59 schools with that combination, 15 (25.4%) of which have women CEO deans (in December 2020).²⁵ If one expands the criteria, there are 65 schools with R1, R2 or AHC Carnegie Classification ratings and > \$500K funding; 18 of 65 (27.7%) have women CEO deans.²⁵ From a different perspective, 30/74 women deans served at some point as deans of schools that now have >\$1 million in funding; 37/74 women have served as deans of schools that now have > \$500K in funding.

The mission of institutions has historically been related to funding. Private schools were generally more teaching-centered, and public universities more research intensive. Currently, however, the distinction between the programs has blurred with both carrying similar weight in both areas. One explanation for this is that American Council for Pharmacy Education (ACPE) accreditation standards require all institutions have the tripartite mission.

As of January 2021, there were 140 US-based schools of pharmacy with accredited (full or candidate status) professional degree programs and two schools with precandidate status.²⁶ Of AACCP member schools of pharmacy, 72 are in private institutions, and 70 are in publicly supported universities.²⁶ Of the 34 women CEO deans serving on December

31, 2020, 19 were leading private institutions and 15 were leading public schools. This is roughly proportional to the overall distribution of public and private institutions.

DISCUSSION

Our examination of the 74 women who have held or are currently holding CEO deanships in US pharmacy schools has led to several important observations, both about the academic background of those assuming deanships as well as their preparation for the role. What is clear is that women CEO deans have a wide range of academic backgrounds and have served in the full range of pharmacy schools.

Draugalis and Plaza as well as Plaza and colleagues have written about the career paths individuals (women and men as a group) follow to become CEO deans.^{27,28} Changes in these pathways occur over time. The hierarchical pathway (faculty to department chair/head to assistant or associate dean to CEO dean) remains most common, while a nontraditional pathway is gaining relevance. We did not specifically look at career paths to deanships, but at the academic background individuals possess to become CEO deans.

The number of women CEO deans with PhDs has declined. This may be due to the switch from a BSPharm to the PharmD degree as the only degree for pharmacy practice. We should carefully track individuals who have both a pharmacy background and a research focus (ie, PharmD plus fellowship or PharmD plus PhD), as they, generally speaking, may be well-rounded candidates for future leadership positions. Some universities offer a BS in pharmaceutical sciences. This degree combined with a PhD in a pharmaceutical science may provide another appropriate background to qualify for a leadership position.

Pharmacy education should explore additional academic background and experiences which may prepare individuals for CEO dean positions. A few women CEO deans have terminal degrees such as an EdD, Doctor of Health Education (DHEd) or Doctor of Medicine (MD). Outstanding deans with PhDs outside of pharmacy have acquired expertise in pharmacy and pharmacy education by serving as faculty members and assistant and associate deans in pharmacy programs over a substantial number of years.

Draugalis and Plaza and Plaza and colleagues have described a nontraditional pathway through which individuals from outside of academia, with appropriate academic background and experiences, have successfully filled pharmacy CEO deanships.^{27,28} It is important for those individuals to have guidance from mentors and speak with individuals in higher education to formulate their views and vision for academic pharmacy.

An increasing number of individuals with PharmD degrees are becoming CEO deans. Many have completed post-doctoral residencies and/or fellowships. This advanced preparation can expand individuals' expertise in pharmacy, administration, research, and other critically important areas for CEO deanships. This may be the academic background for many future CEO deans.

Some women CEO deans have left deanships to assume positions in higher education administration or added those positions to their dean role. This reflects that these women are respected by their institutions for the leadership they have provided in the dean role. The decision to focus primarily on issues of higher education rather than the development of faculty, students and practitioners, research, and the college itself is one of personal preference. It should be noted that although not documented with data in this article, women faculty have moved into higher education administrative roles without assuming a CEO deanship first.²⁹

There is a decline in recent years in the percentage of deans who are women (Figure 1). This is happening at a time when the profession needs CEO deans in increasing numbers because of normal turnover, an increased number of pharmacy schools and the graying of the academy. As of December 31, 2020, there were 14 people in interim CEO dean positions, five of whom were women.³⁰ The academy must prepare for the future by recruiting and preparing leaders for its schools. Diversity including gender, race and ethnicity in the leadership ranks is critical for many reasons. Data show that diversity leads to better decision-making in an organization¹³ and with women making up 65% of actively practicing pharmacy professionals, female role models are essential to help women pharmacists envision their own leadership roles.³¹ In order to have sufficient numbers overall and diversity in those numbers, women must be actively recruited along with men. Plans must be put in place to help candidates of both genders as well as various races and ethnicities to be successful as CEO deans.

One explanation for the decline in the percentage of women CEO deans might be a decrease in the preparation of women to be deans. However, data suggest that the pipeline has many women who could assume such a leadership position. If one assumes future deans need to be professors, 36.6% of professors in our schools in 2020-21 were women.³² If one assumes the path to a CEO deanship may involve an associate dean role, AACP reports that in 2020-21, 49.3% of associate deans in pharmacy schools were women.³² Draugalis and Plaza noted that the department head role may be better preparation for a CEO deanship because of the broad executive responsibilities of today's department head.²⁷ With

this is mind, AACP data show that 37.3% of department heads in 2020-21 were women.³² Clearly, the pipeline may be adequate, but less than ideal to provide a pool of qualified women candidates.

So, what is keeping women from proceeding from their administrative roles as associate deans and department heads to the deanship?

First, one must ask why anyone might want to be a CEO dean. There are both joys and satisfaction as well as challenges associated with the role of dean as expressed in the interviews of three former deans found in the Appendix. There they state that the CEO deanship presents the opportunity to make a difference in the lives of students, faculty, health care, higher education, and the pharmacy profession, which can be highly rewarding.

However, the role of CEO dean is challenging, and not everyone is prepared for the challenges that a dean will face. From the time of appointment, deans have a 24/7 job. Deans are accountable to a broad spectrum of constituents including students, faculty, and alumni. They must continually work to inform university administration and other deans of the needs of the school. Deans must know how to negotiate and when to fight for resources. They serve at the pleasure of their presidents/chancellors, and there will be times when one doesn't know if he/she will have a job the following week. Deans must learn to shepherd resources both financial and human. They must be futuristic, scan the horizon for opportunities and threats while helping people cope with change. They must be cool under intense pressure and know which hills are worth dying on for the good of the school. They must understand that they are essentially in a glass house 24 hours a day.

In these times, leaders are challenged even more to make sense of where the profession and health care are headed. Jordan Cohen speaks to the increasingly rapid rate of change in the profession, higher education, and pharmacy education, together with globalization and economic pressures, and concludes that CEO deanships are becoming increasingly challenging.³³ If one adds the circumstances created by the COVID-19 pandemic, one can see an even-more demanding and fast-paced environment facing deans. Any candidate must be prepared to thrive on problem-solving and welcome the challenge to lead in turbulent times. An excellent dean can have an enormous influence on how his/her institution survives environmental, economic, and other challenges.

However, we see no indication that either the positive aspects or the challenges of a deanship are viewed differently by men and women as they consider moving into this position. While this would be a rich area of study, we must look further as we think about barriers to women becoming CEO deans.

There have been many articles that discuss barriers to the advancement of women. These include family and work values as described in the Appendix by Ilia Oquendo Jimenez. Women experience issues where they may be ready to become a CEO dean but lack mobility because of family issues. As more spouses of both genders have careers of their own, this is likely to be less of a gender specific issue. However, according to McLean and colleagues, women who were mobile were able to advance more easily in academic medicine.³⁴

There are generational differences that occur in both women and men. Today's workforce has, generally, developed a better work/life balance. As faculty observe challenges facing a CEO dean and assess their own work/life situation, they may be happy to stay in their current role, especially if they are succeeding well with a research program, clinical practice or find teaching very satisfying. They may realize that becoming dean would greatly restrict their ability to continue their current activities. We do not know whether these factors influence women differently than men. This may be ground for future investigation.

Finally, there may simply be a lack of career planning that includes preparation for the CEO deanship. Such preparation requires a mentor taking the potential future dean in hand and working with him/her to prepare for the role. These mentors can be of either gender, but potential mentors should identify both men and women and individuals of all races and ethnicities to prepare for such a role. Potential mentors who have an implicit bias about the gender of a successful dean may not identify and work equally well with potential women dean candidates.

A mentor can help candidates identify their strengths and assess the environment(s) where they may best succeed (ie, where their background, experiences and talents best align with the mission of the institution). Schools differ in many aspects: research intensive with graduate education and/or residency education versus a sole focus on PharmD professional education, public versus private, functioning in an academic health center environment, having several campuses to oversee, etc. Certainly, a baseline understanding of pharmacy education, the pharmacy profession, and research are important for all candidates. However, one does not need clinical experience to gain sufficient knowledge of the profession and candidates can understand the research mission without being an outstanding researcher. Guidance to search committees about the qualifications that are most important to that school will help ensure that searches are focused on the most important traits, regardless of race, ethnicity, or gender.

Mentors can help candidates plan experiences and training to fit the schools in which they are interested such as engaging in national programs that teach leadership and management. They can urge mentees to apply when a suitable position becomes available. Mentors may help mentees identify role models (especially female role models) at institutions

that match their strengths. Another role of the mentor is to include the mentee in an expansive range of experiences that a dean undertakes, even if they fall outside the candidate's current responsibilities. Talking with provosts and presidents/chancellors, sitting in on decision-making meetings, working with potential donors and professional organizations will all expand the candidate's preparation. A well-prepared candidate is much more likely to project the confidence needed to impress a search committee.

While the AACP Academic Leadership Fellows Program (ALFP) has done a wonderful job of educating faculty in leadership (as of December 31, 2020, there have been 468 graduates of this important program; 53% female), it has the professional goal of preparing faculty for a wide variety of intermediate leadership positions.³⁵ It seems most appropriate that AACP consider creating an advanced leadership program that would build upon ALFP. It could include topics not covered in the ALFP, but which are essential for a CEO dean to know, such as development, financial management, higher education issues, academic issues, and many others. Perhaps there should be tracks developed within the ALFP that develop fellows for a variety of leadership positions.

While funding such a program is certainly an issue in these tight financial times, it seems possible that funding may be available from search firms who struggle to fill deanships or from companies which hold a stake in having outstanding leadership in our schools. Other mechanisms for developing mentors for both interim deans and aspiring deans should be investigated including a mentor program similar to that developed by the AACP Women Faculty Special Interest Group.

CONCLUSION

Pharmacy education should cultivate its future CEO deans. To have sufficient talent and diversity among those who may seek leadership positions, both women and men of diverse races and ethnicities must be equally recruited, prepared and encouraged to apply for available positions. We know from our data that the percentage of open positions being filled by women is declining. Barriers to entry should be examined and addressed. It is likely that mentorship is a key element in the identification of future deans and their preparation, but AACP can play a key role with an ALFP-like program or tracks specifically aimed at those from various backgrounds who are interested in pursuing CEO deanships or other positions in higher education administration.

*There may be at least one woman CEO dean before pharmacy school accreditation began in 1932. Beebe Steven Lynk (1872-1948) who was African American may have been the first woman of any race to be a dean of a college of pharmacy.² She was dean of pharmacy at the University of West Tennessee from 1907 until the University closed in 1923.²

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Table 1. Women CEO Deans of Accredited United States Colleges and Schools of Pharmacy Through December 31, 2020

Term as Dean Started, month/year/number	Name	University	Founding Dean, Term as Dean Ended, Second Deanship, Other Academic Leadership Position or Retirement
00-1988/1	Adelaide Van Titus	Temple University	1990 to Springfield College as vice president (VP) academic affairs & dean of faculty; 1995 to Cazenovia College as president until 1999
01-1992/2	Ilia Oquendo Jimenez	University of Puerto Rico	06-2005
05-1994/3	Claire Lathers	Albany College of Pharmacy and Health Sciences	president & dean until 08-1996 then to various other positions outside academia
08-1994/4	Eucharia Nnadi	Howard University	01-1997; 02-1997 to University of Maryland Eastern Shore as VP academic affairs until 07-2003; 07-2011 to Henderson Campus Roseman University of Health Sciences as chancellor, in office
06-1995/5	Barbara Wells	Idaho State University	06-2001 to University of Mississippi as dean, retired 12-2011
08-1995/6	Rosalie Segraves	University of Illinois Chicago	06-2006; 07-1998 to 06-2007 co-director UIC/US Department of Health and Human Services Center for Excellence in Women's Health
01-1996/7	Marilyn Speedie	University of Minnesota	retired 08-2017
05-1997/8	Arcelia Johnson-Fannin	Hampton University	founding dean; 06-2004 to University of the Incarnate Word as founding dean, retired 05-2017
07-1998/9	Mary Lee	Midwestern University Chicago	10-2006 to 06-2019 VP/chief academic officer pharmacy, optometry & health sciences; 07-2019 VP & special assistant to president, in office
09-1998/10	Mary Anne Koda-Kimble	Univ of California San Francisco	retired 06-2012
12-1999/11	Mary Andritz Graham	Albany College of Pharmacy and Health Sciences	08-2006 to Butler University as dean, retired 06-2016
06-2000/12	Patricia Chase	Butler University	06-2006 to West Virginia University as dean, retired 06-2016
03-2001/13	Barbara Hayes	Texas Southern University	retired 10-2011
07-2001/14	Beverly Schmoll	Wayne State University	06-2008; 07-2008 to University of Toledo where merged two colleges from two universities (University of Toledo & Medical College of Ohio) forming College of Health Sciences & Human Services. Another merger established Judith Herb College of Education, Health Sciences & Human Services, retired 01-2016
07-2001/14	Diane Shomin Swaffar	LECOM	founding dean, 09-2004

04-2003/16	Raylene Rospond	Drake University	06-2013; 07-2011 to 06-2013 vice provost while dean then 07-2013 to 06-2014 deputy provost; 06-2014 to Manchester University as VP & dean, 07-2015 to 10-2016 VP institutional effectiveness, 10-2016 to 04-2017 interim VP academic resources, 04-2017 to 09-2019 VP academic affairs
10-2003/17	Jeanette Roberts	University of Wisconsin	07-2014; 10-2017 to 12-2018 director University of Wisconsin Center for Interprofessional Practice & Education
04-2004/18	Stephanie Gardner	University of Arkansas	06-2015 provost/senior vice chancellor for academic affairs, in office, & 2019 chief strategy officer, in office
05-2004/19	Katherine Knapp	Touro University California	founding dean, 08-2014; 05-2014 to 08-2015 Touro College & University System as associate provost for pharmacy
06-2004/20	Anne Lin	Midwestern University Glendale	12-2007; 01-2008 to Notre Dame of Maryland University as founding dean, in office
07-2004/21	Renee Coffman	Roseman University of Health Sciences	08-2012 to 12-2013 VP quality assurance, 12-2013 president, Roseman University of Health Sciences, in office
07-2004/21	Patricia Kroboth	University of Pittsburgh	in office
04-2005/23	Beatrice Adderly Kelly	Howard University	06-2011
05-2005/24	Eleanor Sue Cantrell	Appalachian College of Pharmacy	05-2008
02-2006/25	Lesbia Hernandez	University of Puerto Rico	12-2009
08-2006/26	Wendy Duncan	University of Health Sciences and Pharmacy in St. Louis	04-2013; 07-2013 to Drake as dean; 06-2015 to California Health Sciences University as dean & provost until 07-2020
08-2006/26	Julie Hixson-Wallace	Harding University	05-2016; 06-2016 various ascending positions, now VP for accreditation & institutional effectiveness, & associate provost
11-2006/28	Nancy Fjortoft	Midwestern University Chicago	retired 01-2020
01-2007/29	Rebecca Finley	Jefferson University	founding dean, in office
06-2007/30	JoLaine Draugalis	University of Oklahoma	in office
06-2007/30	Sheila Mitchell	Union University	founding dean, in office
01-2008/32	Susan Stein	Pacific University	07-2013; 07-2014 to 07-2017 director Pacific Program for Interprofessional Education and Research
07-2008/33	Natalie Eddington	University of Maryland Baltimore	in office
03-2009/34	Michelle Easton	University of Charleston	07-2020
03-2009/34	Susan Mayhew	Appalachian College of Pharmacy	in office
06-2009/36	Gloria Meredith	Rosalind Franklin University	04-2015 to SUNY Binghamton University as founding dean, in office
01-2010/37	Miriam Mobley Smith	Chicago State University	12-2017
02-2010/38	Lisa Lawson	University of the Sciences, Philadelphia College of Pharmacy	06-2017
05-2010/39	Kathleen Kennedy	Xavier University of Louisiana	in office

09-2010/40	Gayle Brazeau	University of New England	05-2017; 05-2018 to Marshall University as dean, in office
10-2010/41	Ruth Nemire	Fairleigh Dickinson University	founding dean, 07-2012
12-2010/42	Lois Garland-Patterson	American University of Health Sciences	founding dean, 05-2012
01-2011/43	Wanda Maldonado Davila	University of Puerto Rico	in office
01-2011/43	Mary Ferrill	Palm Beach Atlantic	11-2015
10-2011/45	Lynda Welage	University of New Mexico	07-2017 to University of Minnesota as dean, in office founder & executive director of the Medication Access Program at University of Tennessee while dean, in office
02-2012/46	Marie Chisholm-Burns	University of Tennessee	retired 01-2016
01-2013/47	Linda Gore Martin	University of Wyoming	founding dean, 10-2018, deceased
01-2013/47	Kathy Webster	Keck Graduate Institute	08-2018
06-2013/49	Lisa Deziel	Nova Southeastern University	in office
08-2013/50	Julie Johnson	University of Florida	06-2020; 07-2020 to University of the Pacific as dean, in office
07-2014/51	Rae Matsumoto	Touro University California	06-2019; 07-2019 to University of Arkansas as dean, in office
07-2014/51	Cindy Stowe	Sullivan University	in office
03-2015/53	Rhonda Waskiewicz	Husson University	in office
04-2015/54	Debra Parker	University of Findlay	in office
06-2015/55	Renae Chesnut	Drake University	in office
01-2016/56	Serrine Lau	Wayne State University	12-2017
05-2016/57	Anna Morin	MCPHS University-Worcester/Manchester	chief academic officer while dean, in office
07-2016/58	Debbie Byrd	East Tennessee State University	in office
08-2016/59	Toyin Tofade	Howard University	in office
10-2016/60	Carolyn Ma	University of Hawaii, Hilo	in office
11-2016/61	Melissa Hogan	Roosevelt University	in office
01-2017/62	Christine Birnie	St. John Fisher College	in office
01-2017/62	Noreen Chan Tompkins	Loma Linda University	retired 06-2018
04-2018/64	Jane Mort	South Dakota State University	retired 06-2020
08-2018/65	Kelly Smith	University of Georgia	in office
01-2019/66	Jan Hirsch	University of California Irvine	founding dean, in office
06-2019/67	Anuja Ghorpade	Albany College of Pharmacy and Health Sciences	VP academic affairs while dean, in office
06-2019/67	Grace Kuo	Oregon State University	12-2020
08-2019/69	Michelle Clark	Nova Southeastern University	in office
09-2019/70	Karen Hassell	West Coast University	in office

10-2019/71	Angela Kashuba	University of North Carolina at Chapel Hill	in office
01-2020/72	Misty Stutz	Sullivan University	in office
02-2020/73	Marketa Marvanova	University of Montana	in office
07-2020/74	Rachel Ogden	LECOM	in office

Only women who were or are currently CEO deans of accredited colleges and schools of pharmacy are included in this table. It does not contain individuals who are serving or served as interim, acting, associate or assistant deans without having been appointed as a CEO dean.
Note: While multiple efforts have been taken for accuracy, doubtlessly some inadvertent errors may persist.

Table 2. Degrees – First 12 Women CEO Pharmacy Deans (Group A), Appointed 1988-2000

Terminal Degrees	N (%)	With BSP Pharm Degree N (%)	With Other BA or BS Degrees	Other Degrees
PhD	5 of 12 (41.7)	5 of 5 (100)		1 Juris Doctor (JD) 2 Master of Science (MS)
PharmD	6 of 12 (50)	5 of 6 (83.3)	1 without any other degree 1 with a BSP Pharm also has a chemistry degree	
EdD	1 of 12 (8.3)		BA in health, physical education and recreation	1 Master of Arts (MA)

Table 3. Degrees – Current Women CEO Pharmacy Deans (Group B; 34 Individuals), Appointed 2004-2020*

Terminal Degrees	N (%)	With BSP Pharm Degree N (%)	With Other BA or BS Degrees	Other Degrees
PhD	11 of 34 (32.4) with one having 2 PhDs	6 of 11 (54.5)	Individuals without a BSP Pharm have at least one degree in biology, chemistry, psychology, sociology or unspecified area	1 Master's in Education (MEd) 5 Master of Science (MS) 1 with second PhD in pharmacy (Europe)
PharmD	20 of 34 (58.8)	11 of 20 (55)	3 of 9 individuals without a BSP Pharm degree have at least one degree in biology or chemistry	2 Master of Business Administration (MBA) 1 Master of Public Health (MPH) 4 Master of Science (MS)
PharmD/PhD	1 of 34 (2.9)			Second PhD
EdD	2 of 34 (5.9)	1 of 2 (50)	1 with a degree in occupational therapy	1 MBA 1 MS

*In office as of December 31, 2020

Table 4. Higher Education Administration Positions While CEO Dean or After Deanship(s)^a

Leadership Title ^b	While Dean	After Deanship(s)
President	1	2
Chancellor		1
Dean of Faculty		1
Senior Vice Chancellor for Academic Affairs		1
VP Academic Affairs	1	4
VP Accreditation		1
VP Institutional Effectiveness		1
VP Quality Assurance	1	
VP (no specific area)	1	1
Provost	1	1
Associate Provost	1	2
Deputy Provost		1
Vice Provost	1	
Chief Academic Officer	1	1
Chief Strategy Officer		1
Merged Colleges Across Universities		1
Executive Director, Director or Co-Director of a University or National Center or Program	2	1
Special Assistant to President		1

^a No interim or acting positions^b Various academic titles are listed due to differences in names for the same level in rank among universities

Abbreviation: VP=vice president

Figure 1. Number and Percentage of Women Deans in US Schools of Pharmacy 1988-2020