

RESEARCH ARTICLES

Administrative Career Planning: A Ten-Year Update of the Pharmacy Deanship

Cecilia M. Plaza, PharmD, MS, JoLaine Reiersen Draugalis, PhD, Marion K. Slack, PhD, and Grant H. Skrepnek, PhD

College of Pharmacy, The University of Arizona

Submitted May 7, 2003; accepted August 4, 2003; published March 11, 2004.

Objectives. The purpose of this study was to describe the normative career paths and preparation strategies of pharmacy deans, as well to provide a longitudinal perspective on the pharmacy deanship.

Methods. A self-administered questionnaire and 2 follow-up mailings were sent in mid-2002 to 82 current pharmacy deans of AACP member institutions.

Results. Seventy-five deans responded yielding a 91.5% response rate. A hierarchical career path (faculty to department chair/head, to assistant/associate dean, to dean) described the career path of only 17.9% of deans who had assumed their first deanship in the past 5 years.

Conclusions. The picture of the pharmacy deanship appears to be changing, with deans spending an increased length of time in the professoriate prior to their appointments and an increasing proportion of deans holding a PharmD as the highest degree earned. While no normative career path appears to exist for pharmacy deans, this study provides descriptive information on possible career paths to which aspiring deans can refer.

Keywords: career path, administration, dean, colleges of pharmacy

INTRODUCTION

The first inquiry into the pharmacy dean career path was conducted in 1992. A longitudinal follow-up study was conducted in 1997.^{1,2} These studies sought to assess the educational, personal, and professional backgrounds of current pharmacy deans, as well as to identify trends and changes in the pharmacy deanship. Determining the normative career path for pharmacy deans has implications for both administrative career planning and providing information about leadership development opportunities for the next generation of potential leaders. The previous studies found 5 possible career paths leading to the pharmacy deanship.^{1,2} The traditional hierarchical model has the individual move from being a faculty member to department chair or head, followed by an appointment to the assistant or associate dean position, and finally to the deanship.^{1,3} The other possible career paths, shown in Figure 1, are variations of the hierarchical model, missing one or more steps or skipping academic experience altogether in a nontraditional route. In the 1997 study, Drau-

galis and Harrison found that the assistant or associate dean position was skipped more often than the department chair or head position in a faculty member's progression to the deanship.²

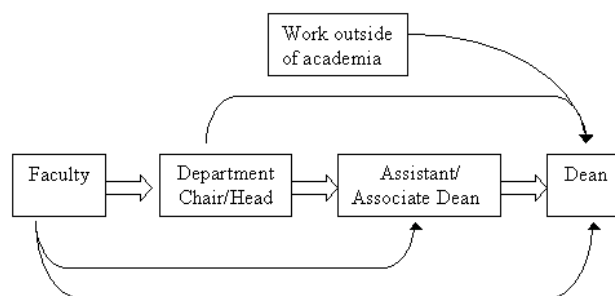


Figure 1. Possible Dean Career Paths

According to the National Survey of Academic Deans (NSAD), the typical dean was a Caucasian married male between the ages of 53 and 54 years old.⁴ The average length of tenure for academic deans was 6 years for men and 5 years for women.⁴ Across academic disciplines there has been a lack of training and preparation for the deanship outside of administrative positions held prior to assuming the deanship.⁴ The deanship of the 21st century has been described as a position in transition from one of being the head scholar to that of being the

Corresponding Author: Cecilia M. Plaza, PharmD, MS, Address: The University of Arizona, College of Pharmacy, P.O. Box 210207, Tucson, AZ 85721-0207. Tel: 520-626-5301. Fax: 520-626-4063. Email: plaza@pharmacy.arizona.edu.

chief officer of a college.⁵ The career path of the academic dean has been described as haphazard, owing to the lack of a set career trajectory.⁶

For academia as a whole, the department chair position has been viewed as the most direct route to a dean position due to the administrative duties required, such as personnel and budgetary management.⁷ The department chair position has been an especially important stepping stone to the deanship at research universities.⁴ The career benefits of serving as the department chair or head are likewise diminished if the position is more that of a figurehead or is a rotating position.⁷ In looking at the career paths of academic deans, Wolverton and Gonzalez noted that while the importance of the department head or chair has been growing, it may be insufficient preparation for the deanship.⁶ Assistant and associate deanships have been seen as less desirable positions for aspiring deans due to the lack of budgetary control and management responsibilities associated with those posts relative to those of the department chair or head. The benefit of serving as an assistant or associate dean relative to a department chair or head is primarily the opportunity to assume many of the dean's responsibilities in his absence and to observe the dean's role from an insider's point of view.⁷ Bright and Richards cited the importance of working in fields such as nursing, education, or social work, but placed less importance on outside experience in other disciplines due to the nature of the responsibilities associated with a deanship.⁷ It is unclear where pharmacy academia would fit into this paradigm since pharmacy deans have not consistently been required to be a licensed pharmacist and/or actually ever practice pharmacy, although the majority of pharmacy deans do have a pharmacy degree. For academia as a whole, across disciplines, there is no set career path trajectory that can be discerned as the norm.⁴

The manpower shortages in pharmacy extend beyond practicing pharmacy and into academic pharmacy.⁸ As more schools and colleges of pharmacy open to meet the demands from the nationwide pharmacist shortage, more faculty members are needed to teach the increasing class sizes and fill new faculty positions. The "graying" of the faculty, as well as faculty leaving academia for higher paying positions in industry and high faculty turnover, has led to what Dr. Richard Penna, then the Executive Vice President of the American Association of Colleges of Pharmacy (AACP), termed a workforce crisis in academic pharmacy.^{8,9} The shortages in academic pharmacy have had an impact on the deanship in that the pool of potential leaders has diminished, resulting in a call for more development and mentoring programs, a need which was also identified as necessary in the previous 2 studies of the career paths of deans.^{1,2,10,11}

The shortages in academic pharmacy as a result of

the increased number of schools and colleges of pharmacy opening, combined with the graying of the faculty, have ramifications for the academic pharmacy deanship. Elucidation of the normative career path of pharmacy deans and the role of administrative mentoring in career advancement can guide aspiring deans as well as provide information to institutions in structuring programs for leadership development. The purpose of this study was to describe the normative career paths and preparation strategies of pharmacy deans, as well as describe the role of administrative mentoring in the career advancement of pharmacy deans. This study also provided a longitudinal perspective on the pharmacy deanship. The role of administrative mentoring in the career advancement of pharmacy deans will be considered in a separate paper.

METHODS

This study employed a descriptive cross-sectional study design using survey research methodology. Deans at every accredited school or college of pharmacy in the United States were included. Subjects were identified using the AACP 2001–2002 Roster of Faculty and Professional Staff.¹² Data from interim and acting deans were to be analyzed separately since their tenure in the deanship was uncertain; however, no deans were in this category. The University of Arizona Human Subjects Protection Program declared this project exempt.

The first mailing was sent via first-class mail on June 10, 2002, and included a cover letter explaining the purpose of the study, a personalized instrument, and a self-addressed postage paid return envelope. Follow-up mailings were sent to all nonrespondents on July 15, 2002, and September 3, 2002. Nonmonetary incentives such as teabags and Lifesavers, were included in each mailing in the hope of increasing the response rate.

Information was collected on demographics, time in the deanship, career pathway, considerations in accepting first deanship, and external professional activities in preparation for the deanship. An abbreviated, 2-page instrument was sent to deans who had participated in the 1996 study, while individuals who either assumed their first deanship since 1996 or were nonresponders in the 1991 and 1996 studies received a 4-page instrument. The reliability of personal factual items has been found to be high.¹³ Since the majority of the longitudinal survey items gathered personal factual information, no formal reliability testing was conducted. Coverage and sampling error were controlled for by striving for a census of the entire population (or nearly so) of pharmacy deans at accredited schools and colleges of pharmacy. Measurement error was addressed by using a previously validated instrument. Multiple mailings were conducted to decrease the potential for nonresponse error.

Data were entered into SPSS 11.0 for analysis. Addi-

Table 1. Longitudinal Comparison of Demographic Characteristics for Three Cohorts of Pharmacy Deans

Demographic Variable	1991	1996	2002
Age of "typical pharmacy dean," M±SD (range)	53.0 ± 6.4 (42–70)	54.0 ± 5.1 (42–68)	57.4*± 5.5 (44–72)
Mean number of years in professoriate prior to assuming first deanship, M±SD (range)	15.0 ± 5.0 (4–27)	16.9 ± 5.2 (7–28)	19.5*±5.6 (9–34)
Length of tenure in current deanship in years, M±SD (range)	7.7 ± 6.6 (1–34)	6.8 ± 6.1 (0.5–24)	7.5 ± 5.5 (0–25)
Highest degree earned, n (%) ‡			
PhD	61 (91)	67 (88.2)	59† (72)
PharmD	5 (7.5)	8 (10.5)	21† (26)
EdD	1 (1.5)	1 (1.3)	2 (2)
Total number of deans	67	76	82§

*Results of one-way ANOVA and multiple comparisons methods showed statistical significance at $P < 0.05$ between the 2002 cohort and the 1996 cohort, as well as, between the 2002 cohort and 1991 cohort

†Results of two-sample test of proportion showed statistical significance at $P < 0.05$ between the 2002 cohort and the 1996 cohort, as well as, between the 2002 cohort and the 1991 cohort

‡ Adapted from the AACP Profiles of Pharmacy Faculty 1991–92, 1995–96, 2001–02.^{12,14,15}

§ One institution was excluded since they were in the dean search process at the time of data collection.

tional analyses were done using Primer of Biostatistics Version 4.0 and StataQuest Version 4.0 for Windows. Descriptive statistics such as means, standard deviations, and percentages were calculated for demographic data. Longitudinal comparisons were conducted across the 1991, 1996, and 2002 cohorts of pharmacy deans, which were snapshots of the deanship at 3 different points in time. Longitudinal data that were continuous were analyzed using a one-way ANOVA with the Bonferroni and Tukey multiple comparisons procedures for significant results. Two-sample tests of proportions were used on longitudinal data measured at a discrete level of measurement. The a priori level of significance was set at alpha equal to 0.05.

RESULTS

At the time of data collection in mid-2002, there were 83 schools and colleges of pharmacy. One institution that was in the midst of the dean search process was excluded from data collection. Using a self-administered questionnaire and 2 follow-up mailings, 75 out of 82 member institutions responded, yielding a 91.5% response rate. Twenty-nine out of 35 deans named since the previous data collection responded and were designated as "newly named deans." The 46 deans who had held a deanship prior to 1996 were designated as "established deans," 44 of whom had participated in the 1996 study and 2 of whom were previous nonrespondents participating for the first time.

Demographics

The "typical pharmacy dean" in this study was a Caucasian male, 57.4 ± 5.5 years old (range, 44–72 years), who held a pharmacy degree. The average time spent in the professoriate prior to assuming their first deanship was 19.5 ± 5.6 years (range, 9–34 years). The

average tenure in his or her current deanship was 7.5 ± 5.5 years (range, 0–25 years).

Newly named deans spent an average of 22.3 ± 5.2 years in the professoriate prior to assuming their first deanship, compared with established deans who had spent an average of 17.9 ± 5.3 years in the professoriate ($P = 0.001$). Table 1 shows a longitudinal comparison across the 1991, 1996, and 2002 dean cohorts of demographic characteristics.^{12,14,15} There was no difference in the average length of tenure in the current deanship across the 1991, 1996, and 2002 cohorts ($P = 0.679$). While there was no difference between the 1991 and 1996 cohorts, the 2002 cohort spent a longer time in the professoriate prior to assuming the deanship than in the previous 2 studies ($P < 0.0001$). For the 2002 cohort, male deans had an average length of tenure in their current deanship of 8.2 ± 5.6 years (range, 0–25 years) vs female deans who had an average length of tenure of 3.5 ± 2.3 years (range, 1–7 years) ($P < 0.0001$). While the most common terminal degree earned by current deans continued to be a PhD (held by 59 deans or 72%), the proportion of pharmacy deans holding a PharmD as the highest degree earned had increased since the 1996 study ($P = 0.0129$).

Fifty-nine current deans (79.7%) indicated that their current dean position was their first deanship ($n = 74$). Sixty-seven current deans (94.4%) reported having a pharmacy degree ($n = 71$). Data were not collected on how many current deans were licensed pharmacists.

Career Path

The hierarchical career path described the career path of 13 (17.6%) of the current pharmacy deans. The breakdown of the variations of the career paths for the cohort of deans in this data collection is shown in Figure 2. Newly named deans were more evenly distributed across

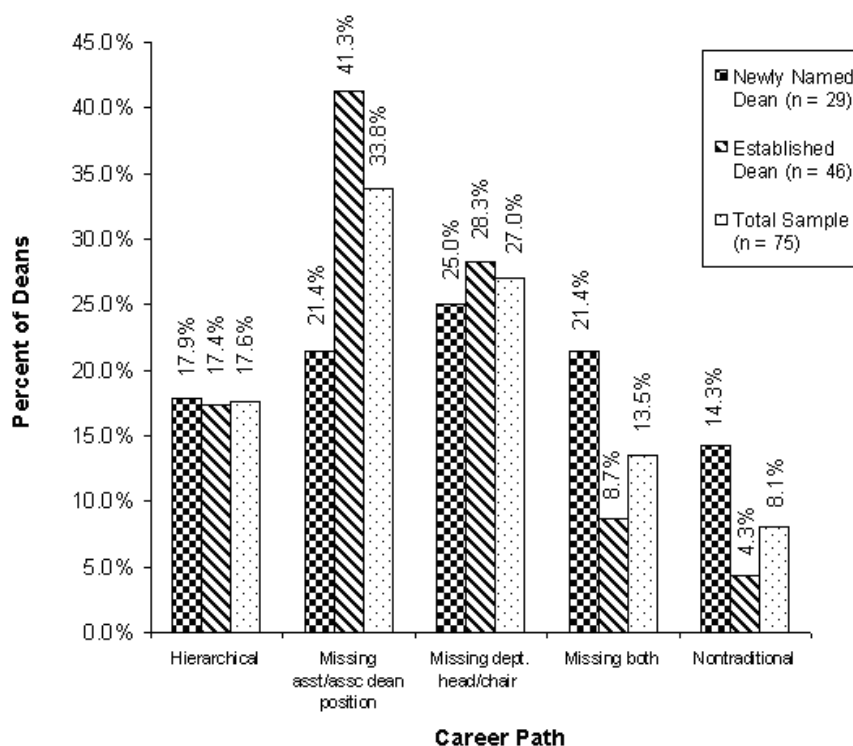


Figure 2. Career path comparisons for the 2002 cohort of pharmacy deans.

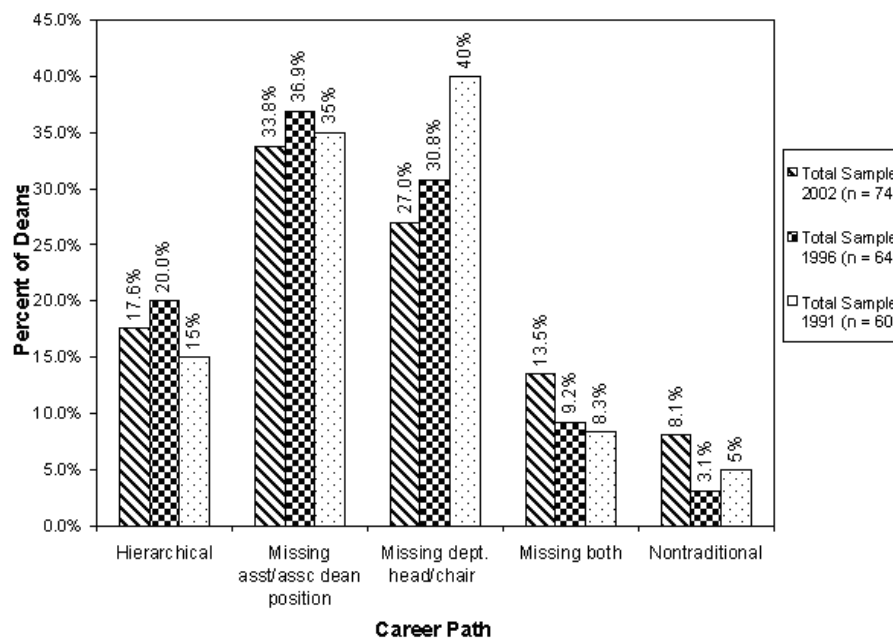


Figure 3. Longitudinal career path comparisons for 1991, 1996, 2002 dean cohorts.

possible career paths that skipped either the assistant/associate dean position, the department head/chair position, or both positions, than were the deans in the previous 2 cohorts. In the 2002 cohort there was an increase from previous cohorts, in the percentage of individuals following a nontraditional career path to the deanship, with 4 of the newly named deans (14.3%) and 2 of the established deans (4.3%). The varied career paths of newly named deans included working in industry or a

professional organization, working outside of academia for periods of time in a variety of capacities, and working outside of pharmacy all together. Of the 29 newly named deans, 41.4% were promoted from within their institution. In the 1996 study, 6 out of the 25 newly named deans (24%) were promoted from within their own institution.

Figure 3 shows the longitudinal comparison of the 1991, 1996, and 2002 cohorts. The percentage of deans

Table 2. Professional Activities of Newly Named Deans (N = 29)

Activity	Have Not Participated, n (%)	Participated, Not Important, n (%)	Participated, Somewhat Important, n (%)	Participated, Very Important, n (%)
Paid external consultant (N = 28)	13 (46)	4 (14)	7 (24)	4 (14)
American Council on Education Fellows Program	29 (100)	0	0	0
American Council on Education Department Chair Program	28 (97)	0	1 (3)	0
Other administrative fellowship/internship	25 (86)	0	4 (14)	0
Serve on board of directors of state/regional professional organization	7 (24)	1 (3)	11 (38)	10 (35)
Serve in elected position of state/regional professional organization	11 (38)	2 (7)	10 (35)	6 (21)
Serve on board of directors of national professional organization	15 (52)	1 (3)	6 (21)	7 (24)
Serve in elected position of national professional organization	14 (48)	0	9 (31)	6 (21)
Attend specialized professional workshops/seminars for minorities (N = 28)	14 (50)	3 (11)	9 (32)	2 (7)
Attend AACP programming	1 (3)	2 (7)	10 (35)	16 (55)
Institutional specific programs for leadership (N = 27)	4 (15)	3 (11)	12 (44)	8 (30)
Other (open-ended responses) *				

* Open-ended responses dealt with the value of AACP New Dean's conference and raising children

following the hierarchical career path or skipping the assistant or associate dean position appears to have remained fairly constant over the past 11 years. The percentage of deans skipping the department head or chair position in their career path appears to have consistently decreased since the first data collection, from a high of 40% in 1991, to 30.8% in 1996, and finally to 27% in 2002. Conversely, the percentage of deans skipping both positions appears to have consistently increased since the first data collection.

Professional Activities

Newly named deans were asked to rate various professional activities as follows: "have not participated," "participated, not important," "participated, somewhat important," or "participated, very important." The results are detailed in Table 2. Only 13 of the 29 newly named deans indicated which 2 activities were most highly recommended to aspiring administrative candidates (irrespective of their own participation). Those rankings were: AACP programming, institutional specific programs, serving on the board of directors of a national professional organization, and serving in an elected position in a national professional organization.

Most newly named deans (n = 29) had attended AACP programming (97%), attended institutional specific programs for leadership (85%), served on the board of directors of a state/regional professional organization (76%), and served in an elected position of a state/regional professional organization (63%). Over half of the newly named deans believed that these activities had been a somewhat important or very important contribution to their professional advancement as an administrator. None of the newly named deans participated in the

American Council on Education (ACE) program. One dean participated in the ACE's Department Chair Program and 4 deans participated in other administrative fellowships or internships.

Gaining further financial and personnel management skills outside of academia was further supported by the activities that newly named deans, irrespective of their own participation, highly recommended to aspiring administrative candidates. The most highly recommended activities were serving in an elected position or on the board of directors of a national professional organization. Over 60% of newly named deans actually served either on the board of directors of a state/regional professional organization or in an elected position in a state/regional professional organization or both. While these activities would appear to be centered around gaining leadership and personnel management skills, the extent of exposure to financial management training remains unclear.

Considerations in Accepting First Deanship

Newly named deans rated the mission/philosophy of the institution, institutional reputation, and geographic location as considerations having high importance in making the decision to accept their first deanship. The retirement plan, spousal employment opportunities, and family educational opportunities were rated as having low importance. Salary, benefit package, being ready for a career change, and the physical facilities of the institution were rated as having moderate importance. When compared with the 1996 dean cohort, the mission/philosophy of the institution continues to be rated as having a high importance as a consideration in accepting their first deanship, while being ready for change appears to have decreased in importance, having previously been

Table 3. Response Frequencies and Percentages Regarding Consideration in Accepting First Deanship for Newly Named Deans (N = 29)

Reason	Importance Rating, n (%) [*]					Mean±SD
	Not at all	Low	Moderate	High	Very High	
Institutional reputation	1 (3)	0	6 (21)	7 (24)	15 (52)	4.21 ± 1.01
Geographic location	2 (7)	0	4 (14)	7 (24)	16 (55)	4.21 ± 1.15
Salary	2 (7)	2 (7)	9 (31)	11 (38)	5 (17)	3.52 ± 1.09
Benefit package	1 (3)	1 (3)	12 (41)	12 (41)	3 (10)	3.52 ± 0.87
Spousal employment opportunities	13 (45)	6 (21)	5 (17)	2 (7)	3 (10)	2.17 ± 1.36
Family educational opportunities	13 (45)	2 (7)	6 (21)	4 (14)	4 (14)	2.41 ± 1.57
Ready for a change	5 (17)	2 (7)	2 (7)	11 (38)	9 (31)	3.59 ± 1.45
Physical facilities of the institution	2 (7)	4 (14)	9 (31)	9 (31)	5 (17)	3.38 ± 1.15
Mission/philosophy of the institution	1 (3)	1 (3)	2 (7)	5 (17)	20 (69)	4.45 ± 1.02
Retirement plan	5 (17)	1 (3)	13 (45)	10 (35)	0 (0)	2.97 ± 1.05
Other (open-ended responses) [†]	0 (0)	0 (0)	0 (0)	0 (0)	2 (7)	3.00 ± 2.31

^{*}Degree of importance was rated on a 5-point scale (anchored at 1 = not at all and 5 = very high)

[†]Open-ended responses dealt with campus and institutional issues such as commitment, leadership, and appointment to position

rated as having a high importance in 1996. Spousal employment opportunities and family educational opportunities were consistently the lowest rated considerations in 1991, 1996, and 2002. The results are detailed in Table 3.

Skills Needed for Future Administrators

According to deans who responded to the most recent study on the career paths of pharmacy deans, the skills that would be needed by future administrators included fiscal management, governance, decision-making, strategic planning, and fundraising.² In examining the advertisements for pharmacy dean positions appearing in the monthly newsletter "ACCP News" from 1996 to early 2002, we found that the following criteria were given, listed here according to the order of preference typically given: doctorate degree, demonstrated capacity as a teacher and scholar, ability to secure external funding sources, administrative management experience, leadership experience, and experience with and sensitivity to diversity. Several advertisements also called for the candidate to be eligible for licensure as a pharmacist in the state in which the institution was located and/or for prior experience as a pharmacist. Only a few advertisements specifically listed fiscal management as a candidate qualification.

Advice From Retiring Deans

The primary themes of the advice provided by individuals leaving the deanship, either through retirement or stepping down, revolved around mentoring and the ability to manage budgetary matters such as fundraising. Other areas that were mentioned by 2 or more deans included developing as a scholar in teaching, research, and service prior to considering a deanship, being able to respond to changing priorities within the university, and

treating other people and disciplines with respect and insisting that others do the same.

Budgetary issues were mentioned by 5 of the 12 deans who responded to this item. Budgetary considerations were listed in the context of learning how to manage financial resources, fundraising, grantsmanship, and development. One dean commented that the role of the dean was no longer that of academic leader, but rather focused upon development and grantsmanship. Another dean felt that in academia today, if an aspiring dean was not comfortable with fundraising and development, they should direct their talents elsewhere.

Six deans mentioned the importance of mentoring, both in seeking mentoring out in career advancement and providing mentoring in the decanal role. Mentoring was mentioned in the context of the opportunity to influence others, identifying and supporting the development of those who wish to move ahead, and identifying role models. In regard to role-modeling, one dean suggested analyzing someone who is successful and someone who is failing. One dean suggested developing an administrative structure that facilitates the identification and mentoring of young faculty with leadership potential for administrative roles.

DISCUSSION

The length of time in the professoriate prior to assuming the first deanship continues to increase, as does the average age of pharmacy deans. Both trends appear to support the growing concerns over the graying of the pharmacy faculty and deanship.^{4,5} While data were not collected on age at accepting first deanship, the average age of newly named deans appears to be fairly static. For the 1996 cohort, the average age of the newly named dean group (mean = 53.5 years, SD = 5.7) was not differ-

ent from the average age of newly named deans in the 2002 cohort (mean = 54.3 years, SD = 6.00). Potential future deans may choose to stay in the professoriate longer so as to not uproot their families, or they may wait until children are grown before pursuing a deanship. Pharmacy deans may also be staying in the professoriate longer due to a lack of interest in the deanship.

Overall, pharmacy deans appear to stay in their current deanships longer than academic deans across all disciplines. Male pharmacy deans had a longer average tenure in their current deanship (8.2 years) compared with that of the average male academic dean (6 years). Female pharmacy deans appeared to have a shorter average tenure (3.5 years) in their current deanship compared with the average tenure of female academic deans in general (5 years). The difference may be attributed to the relatively recent entry of more women into the pharmacy deanship given that 7 of the 10 female pharmacy deans in the 2002 cohort were newly named deans.

The number of deans holding a PharmD continues to increase. Currently slightly more than a quarter of all pharmacy deans hold a PharmD as the highest degree earned. This could suggest that there is potentially a smaller pool of individuals holding a PhD who are interested in assuming the deanship. As the number of schools and colleges of pharmacy continues to increase, the number of deans holding a PharmD as the highest degree earned may continue to grow as well. While the ramifications of this are not clear, there may be a need for additional training for those deans without graduate training. It is also not clear how the additional training in evaluation and problem solving received in graduate education affects preparation for the deanship. However, those deans with a research fellowship in addition to a PharmD may possess these types of skills as well. As more women enter the deanship, this could increase the number of deans holding a PharmD as the highest degree earned, given the relatively larger percentage of female faculty in the pharmacy practice discipline versus other disciplines where a PhD would be more common.¹²

While spousal employment continued to be rated as having low importance as a consideration in accepting a first deanship, its relative importance may change as more women enter the deanship. The importance of family educational considerations may also increase if younger individuals assume the deanship. While it is unknown if younger faculty were more likely to be in dual-career marriages, this also may affect the importance of spousal employment opportunities if these individuals pursue deanships. Those who have a significant other whose career is of primary or equal importance to their own may simply choose not to become deans and therefore would not be represented in this sample. In academia as a whole, 90% of male deans are married compared

with only 60% of female deans. However, the vast majority of female deans are married.⁴

The newly named deans appear to be going against the national trend of deans skipping assistant/associate dean positions.⁴ When compared with established deans, newly named deans as a group had a much smaller percentage that had skipped these positions. Six newly named deans skipped the assistant/associate dean position, 7 skipped the department head/chair position, and 6 skipped both positions. This is contrary to the literature suggesting that there has been a decrease in the importance of assistant/associate dean positions in the career path to the deanship in academia as a whole due to the lack of budgetary control and management opportunities.⁴ The career paths of newly named deans appears to agree more with the position that, for academia as a whole, deans do not follow a set career path, although this trend potentially may change as the importance of the department head/chair position increases.⁶ Wolverton and Gonzalez did note that, while the importance of the department head or chair position continues to grow for academia as a whole, it too may be insufficient, and that there needs to be more development programs for deans as well as programs to identify faculty with leadership potential.⁶

Another area where newly named deans appeared to show a potential trend was in being promoted from within their own institution. Twelve of the 29 (41.4%) newly named deans in the 2002 cohort were promoted from within their institution. In the 1996 cohort, 6 (24%) out of 25 newly named deans were promoted from within their own institution. The apparent increase in the percentage of those internally promoted may be a reflection of an increased willingness to promote in-house talent. This willingness could be the recognition that if the best candidate is already at the institution, there is no need to go outside the institution, as well as a reflection of decreased resources to conduct outside searches.

The advice from those pharmacy deans leaving the deanship in 2002 and 2003 supported the need for learning how to manage financial resources, fundraising, grantsmanship, and development. These skills, while necessary, may not be learned only in the department head or chair position, but can be gained in other venues as well. Examples of those following nontraditional career paths included experiences such as serving as director of pharmacy for an institution or in other positions outside of academia that had financial responsibilities. In looking at the career paths of academic deans, Wolverton and Gonzalez noted the growing number of deans gaining experience outside of academia in areas such as management.⁶ This growing phenomenon was suggested as an increasing recognition by universities and deans alike of the need for training in addition to the experience

gained while serving as a department chair or head.⁶

Looking at the overall career paths for the 2002 cohort of pharmacy deans, they do appear to agree with the national trend of increasing importance of the department head/chair position. There appears to be fewer deans skipping the department head/chair position over the 11-year period since the original study. The assistant/associate dean position was skipped by the highest percentage of pharmacy deans in the 2002 cohort, yet has remained relatively static since the 1991 study. The percentages of those skipping both or following a nontraditional career path continues to increase since the 1991 study, indicating an increasingly varied path to the deanship. The current portrait of pharmacy dean career paths suggests that there is no true normative career path because of the diversity of possible paths. This suggests that multiple methods of gaining the skills and experience needed to assume the deanship may exist. As Wolverton et al noted, identification of those skills and experiences may prove valuable to aspiring deans, especially given that across disciplines there has been a lack of training and preparation for the role of academic dean beyond serving in administrative positions prior to assuming a deanship.⁴ Identification of those skills and experiences becomes even more important in light of the additional schools and colleges of pharmacy in the process of hiring deans and faculty members, with future hiring by even more institutions anticipated. The climate appears to be such that individuals could be selected to be dean regardless of whether they possess the desired skill set.

American Association of Colleges of Pharmacy programming continues to be listed as highly recommended to aspiring administrative candidates and continues to be listed as an activity that nearly every dean has participated in. This appears to support the call for more mentoring and development programs for deans, particularly within AACP, to prepare and recruit future pharmacy deans.

CONCLUSIONS

The picture of the pharmacy deanship appears to be changing, with deans spending an increased length of time in the professoriate prior to their appointments, and an increasing proportion of deans holding a PharmD as the highest degree earned. This changing picture of the deanship may be a reflection of the available supply of potential deans in the face of the increased demand resulting from a steadily increasing number of schools and colleges of pharmacy. While no normative career path appears to exist for pharmacy deans, this study provides descriptive information on possible career paths to which aspiring deans can refer. Since AACP programming continues to be an important external activity in providing preparation for the deanship, the as-

sociation is in a unique position to provide potential and current deans with training in various areas.

As the deanship in academia as a whole moves from being a position of the head scholar to the chief officer of the college, financial management issues have grown in importance.⁵ Further research is needed to assess the sufficiency of financial experience and training for those deans who did serve as a department chair or head and those who skipped that position. Wolverton and Gonzalez suggested that while the department head/chair position has been increasing in importance, it might still provide insufficient experience.⁶ Further research also needs to be conducted concerning the lack of participation in available programming such as the American Council on Education department head program.

REFERENCES

1. Draugalis JR. Career paths of today's pharmacy deans and implications for administrative career planning. *Am J Pharm Educ.* 1992;56:373-380.
2. Draugalis JR, Harrison DL. Administrative career planning: a five-year update of the pharmacy deanship. *Am J Pharm Educ.* 1997;61:45-50.
3. Moore KM, Salimbene AM, Marlier JD, Bragg SM. The structure of presidents' and deans' careers. *J Higher Educ.* 1983;54:500-515.
4. Wolverton M, Gmelch WH, Monitez J, Nies CT. *The Changing Nature of the Academic Deanship.* (Vol 28). ASHE-ERIC Higher Education Report. San Francisco: Jossey-Bass Publishers; 2001.
5. Nies C, Wolverton M. *Mentoring Deans.* Paper presented at the meeting of the American Education Research Association, New Orleans, LA; 2000.
6. Wolverton M, Gonzalez MJ. *Career Paths of Academic Deans.* Paper presented at the meeting of the American Education Research Association, New Orleans, LA; 2000.
7. Bright DF, Richards MP. *The Academic Deanship: Individual Careers and Institutional Roles.* San Francisco: Jossey-Bass Publishers; 2001.
8. Penna RP. Academic pharmacy's own workforce crisis. *Am J Pharm Educ.* 1999;63:453-454.
9. Brazeau GA. Chair report for the research and graduate affairs committee. *Am J Pharm Educ.* 2001;65:26S-31S.
10. Dean JO. Leadership in academic pharmacy can be caught and taught. *Am J Pharm Educ.* 2001;65:422.
11. Sagraves R. Need for development programs for current and future deans. *Am J Pharm Educ.* 2001;65:203.
12. AACP Institutional Research Report Series. *2001-2002 Profile of Pharmacy Faculty.* Alexandria, VA: American Association of Colleges of Pharmacy; 2002: 1;3.
13. Kerlinger FN, Lee HB. *Foundations of Behavioral Research.* Orlando: Harcourt College Publishers; 2000.
14. AACP Institutional Research Report Series. *1991-1992 Profile of Pharmacy Faculty.* Alexandria, VA: American Association of Colleges of Pharmacy; 1992: 1;3.
15. AACP Institutional Research Report Series. *1995-1996 Profile of Pharmacy Faculty.* Alexandria, VA: American Association of Colleges of Pharmacy; 1996: 1;3.