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Report of the 2013-2014 Argus Commission: Diversity and Inclusion in Pharmacy Education

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INTRODUCTION

The American Association of Colleges of Pharmacy Argus Commission is comprised of the five immediate past AACP presidents and is annually charged by the AACP President to examine one or more strategic questions related to pharmacy education, often in the context of environmental scanning. President Peggy Piascik charged the 2013-14 Argus Commission with a broad examination of the issue of diversity and specifically with identifying responses to the following question: How can we more effectively address and serve the diversity in our membership at both the institutional and individual level and prepare our learners to serve an increasingly diverse population of consumers?

The Commission examined issues of diversity and inclusion from five distinct but related perspectives. These included: 1) societal diversity; 2) the applicant pipeline; 3) current students; 4) pharmacy faculty, and; 5) AACP and its member institutions. The analysis included an examination of trends over a period of approximately ten years plus projections related to specific demographic parameters.

The work of the Argus Commission benefited from several recent publications. Navigating Diversity and Inclusion in Veterinary Medicine [1] provides a comprehensive analysis of demographic trends and issues interpreted for the veterinary profession, many of which apply equally to this analysis. The American Council on Education (ACE) released in June 2013 the fourth monograph in their series on diversity in higher education. "A Matter of Excellence: A Guide to Strategic Diversity Leadership and Accountability in Higher Education"[2] provides substantive guidance on diversity policy and practice in the academy. The Commission's discussions were also influenced by the contributions in the literature of Scott Page[3] and colleagues who have written about the value proposition of diverse working groups, including the construct of diversity of thought and perspectives. This is a theme that will be central to the Argus Commission report and recommendations.

THE CASE FOR DIVERSITY AND INCLUSION

In *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies*[3], Scott Page first defines terms related to diversity and then differentiates cognitive diversity (e.g., thought, perspective) from identity diversity (e.g., race, ethnicity, gender). He then provides the evidence supporting the subtitle that suggests diversity is stronger than homogeneity in multiple contexts.

In his introduction he emphasizes that "diversity does not translate magically into benefits." He notes that diversity must be relevant, collegial and understood more deeply by those working to bring the benefits of diversity and inclusion into the community, schools, workplace and society in general. Diversity requires commitment from all levels of leadership. He contends that in many situations diversity trumps individual ability and that cognitive diversity has a stronger evidence base than identity diversity.

In the introduction of "A Matter of Excellence"[2], the authors "challenge the higher education community to face the imperatives of a new reality in which diversity is no longer simply a question of moral and social responsibility, but a matter of achieving excellence and gaining competitive advantages in the world we live in today: a matter of improving organizational creativity, learning, problem solving, and institutional effectiveness – of sustainability and relevance in a twenty-first century knowledge economy." The monograph offers higher education institutions a clear and compelling roadmap for building

diversity into the infrastructure of the organization at every level. It calls for efforts involving senior leaders, chief diversity officers, deans, department chairs, students, faculty, alumni and others to work toward a common goal: "to move beyond the cycle of diversity crisis, action, relaxation, and disappointment that has been repeated so frequently on college and university campuses."

To achieve this goal, ACE offers five key principles:

1. Redefine issues of diversity, equity, and inclusion as fundamental to the organizational bottom line of mission fulfillment and institutional excellence;
2. Focus on creating systems that enable all students, faculty, and staff to thrive and achieve their maximum potential;
3. Achieve a more robust and integrated diversity approach that builds on prior diversity models and operates in a strategic, evidence-based, data-driven manner that holds accountability paramount;
4. Focus on diversity-related efforts that innovate and transform the institutional culture, not merely on tactical moves that lead to poorly integrated efforts and symbolic implementation; and
5. Lead with a high degree of cultural intelligence and awareness of different identities and their significance in higher education.

In the context of accountability, the report recommends the use of a strategic diversity scorecard and offers several examples of multidimensional performance measurement tools in use by various organizations. The report itself contains detailed charts of objectives, tactics and indicators (both process and outcome) that could be selected by an institution committed to public accountability in the achievement of organization-wide diversity and inclusion goals.

The veterinary medicine contribution offers a different perspective on the imperative for identity diversity in their discipline, and the Argus Commission immediately saw the parallels for pharmacy and other health professions. In the period leading up to the release of Navigating Diversity and Inclusion in Veterinary Medicine[1], that profession was celebrating the 250th anniversary of the founding of veterinary medical education in Lyon, France in 1761. The authors noted that virtually all of the achievements celebrated in 2.5 centuries were those of Caucasian males. They wondered aloud how much more progress might have been made if the profession's diversity profile was more similar to that of the general population.

As health sciences that are dependent on a healthy science, technology, engineering and mathematics (STEM) pipeline, veterinary medicine, pharmacy and others cannot afford to ignore population trends and issues that are creating an increasingly diverse society in terms of identity. Despite numerous efforts to strengthen STEM education and increase the number of STEM graduates, America is falling behind other nations in this realm and the pipeline of future health professional students and practitioners is at risk as a result. With proportionately fewer individuals from historically under-represented minority (URM) groups pursuing post-secondary degrees in STEM fields, the health professions face considerable challenges in attempts to increase the presence of URM students and practitioners in our disciplines.

The Association of American Veterinary Medical Colleges (AAVMC) has defined URMs in their profession as "those populations whose advancement in the veterinary medical profession has historically been disproportionately impacted by six specific aspects of diversity (gender, race, and ethnicity, and geographic, socioeconomic, and educational disadvantage)." AAVMC acknowledges that this definition fails to include other attributes, such as age, disability, sexual orientation, gender identity, religious or political beliefs, socioeconomic background and other differences. According to Page[3], such differences may contribute more to cognitive diversity than the traditional diversity parameters.

Building upon the charge from President Piascik, the Argus Commission studied the diversity issues across the broad swath of current societal trends and how they affect the pipeline for learners, practitioners and faculty. They further studied AACP's institutional diversity and attempted throughout the analysis to answer the key questions of how to insure there is an adequate degree of diversity within our profession and what AACP might offer as a membership organization to enable members to put diversity and inclusion to best use in their daily work.

SOCIETAL TRENDS AND THE PHARMACY EDUCATION PIPELINE

The US Census Bureau estimated the US population as of July 1, 2013 to be 316,128,839. The April 1, 2010 census reported 308,745,538 persons in the US. Percentages of the US population in 2010 by race/ethnicity and comparative percentages were[4,5]:

When compared with the 2010 US Census, population demographics, pharmacy school applications and enrollments in 2012, respectively, have under-representation among Whites (-36.1%/-19.2%), Blacks/African Americans (-2.4%/-5.7%), Hispanics or Latinos (-11.1%/-12.3%), and American Indians or Alaska Natives (-0.7%/-0.5%), while

Table 1.

Race / Ethnicity	Number in 2010	% of US Population in 2010 (% in 2000 Census)	% Change Within Category 2000 to 2010
United States Population	308,745,538	100.0	9.7
White	223,553,265	72.4 (75.1)	5.7
Black or African American	38,929,319	12.6 (12.3)	12.3
Asian	14,674,252	4.8 (3.8)	43.3
American Indian or Alaska Native	2,932,248	0.9 (0.9)	18.4
Native Hawaiian or other Pacific Islander	540,013	0.2 (0.1)	35.4
Some other race*	19,107,368	6.2 (5.5)	24.4
Two or more races*	9,009,073	2.9 (2.4)	32.0
Subgroups			
Hispanic or Latino	50,477,594	16.4 (12.5)	43.0
Not Hispanic or Latino	258,267,944	83.7 (87.5)	4.9

*An error in data processing in the 2000 census resulted in errors in reporting the "Some Other Race" and "Two or More Races" categories; these race category totals for the 2000 census should be compared with caution. The overall total population and numbers for other racial categories are valid for comparative evaluations.

Asians are over-represented (+29.4%/+18.8%) and Native Hawaiian or other Pacific islanders have 0.8% over-representation among those admitted, while their application percentages equate to the 2010 population demographics.[6,7]

Between 2000 and 2050, the US Asian population is projected to grow by 79% and the Hispanic/Latino population will more than double. The non-Hispanic Caucasian/White population is projected to decline by 6% between 2000 and 2050.[8] In 2010, non-Caucasian/non-White populations comprised only 18.4% of doctoral and/or professional degrees while these populations comprised 27.6% of the US population; thus, there was underrepresentation of such degrees in non-whites of 9.2%.[9]

STEM disciplines, including pharmacy, have received increased White House, legislative and educational attention because of the importance of these occupations to society in the face of declining student performance in these areas. Many STEM fields are among the fastest growing occupations and are relatively high income professions. Although they comprised almost 20% of young adults in the US age 18-24 years, only 10% of female African American/Black, Hispanic/Latina, and Native Americans in that age range received a STEM bachelor's degree in 2008 and, for minority males under 24, only 12% of STEM bachelor's degrees were earned.[10]

Clearly, the health professions pipeline is in peril if we fail to engage appropriately with many on-going efforts to stimulate interest in STEM education and careers beginning in the K-12 pipeline. AACP is aware of activities at member schools focused on the STEM pipeline and applauds such efforts. As an academy, we need to actively recruit students from all backgrounds to enter scientific studies and work to retain them through bachelors and PharmD studies. Ideally, pharmacy must grow in diversity along the same lines as population demographics and demographic shifts.

AACP's colleague organizations in medicine and dentistry, specifically, the Association of American Medical Colleges (AAMC) and the American Dental Education Association (ADEA), have rich and deep portfolios of programs aimed at increasing the diversity of applicants, students, faculty and staff in medicine and dentistry, respectively. The programs in the AAMC Diversity Policy and Programs area span three portfolios: Human Capital, Organizational Capacity Building, and Public Health[11]. AACP should study the structure and success of such programs and identify the means to collaborate more closely with these organizations and/or work to replicate successful programs to achieve the diversity goals for pharmacy education and practice.

PHARMACY STUDENTS AND FACULTY

Medical education has shown that students who learn as part of a diverse student population are more likely to feel prepared to care for patients from diverse backgrounds than are those graduating from less diverse schools.[12] Chisholm-Burns published a Viewpoint in the *American Journal of Pharmaceutical Education* in 2004 stating that diversity was an essential component of professionalism in pharmacy education[13]. Citing the ample evidence that diversity was linked to enhanced learning and to improved patient satisfaction and health outcomes, the author concludes with this statement: "Increasing diversity among our profession needs to occur not only because it is the right thing to do, but because it is also the smart thing to do. Now is the time for us to

diversify for the sake of our commitment to society and professionalism."

Nkansah and colleagues systematically assessed the diversity literature for an article published in 2009[14]. While not finding a substantial body of literature in pharmacy addressing issues of diversity, they drew upon the evidence from business, higher education and health care to provide an overview of some of the issues and considerations related to diversity programs. The authors provided an evidence-based conceptual framework for nurturing and developing diversity programs. Their framework includes many of the key principles included in the ACE report cited previously.

Yet, 10 years later, not much progress has been made in the diversity profile of student pharmacists or pharmacy faculty. This is not for lack of an understanding or a commitment on the part of US colleges and schools of pharmacy as evidenced by such examples as the establishment of the Office of Recruitment, Development and Diversity Initiatives at the UNC Eschelman School of Pharmacy[15].

Chisholm-Burns and colleagues conducted a longitudinal analysis of women and under-represented minority faculty members in academic pharmacy for the period of 1989-2009[16]. The percentage of women faculty members more than doubled in this time period from 20.7 % to 45.5%, and growth was seen at all ranks as well as in administrative positions. The number of under-represented minority faculty increased only slightly over the same period and remained below 10% at the ranks of associate and full professor.

The investigators also surveyed female faculty members at nine public colleges and schools of pharmacy with national geographic representation. The survey assessed factors influencing women faculty members' pursuit of an academic pharmacy career and focused on three domains: choosing to pursue and retain a career in academic pharmacy; the influence of role models; and advice to women on pursuing a career in academic pharmacy. The authors conclude that the "significant increase in women faculty members over the last 20 years may be due to the increased number of female pharmacy graduates and to women faculty members' satisfaction with their careers." They encourage the academy to consider how these factors might also improve recruitment and retention of URM faculty members where similar progress has yet to be made.

INSTITUTIONAL DIVERSITY AND AACP

The diversification among colleges and schools of pharmacy began early in US pharmacy history when Albert B. Prescott led the University of Michigan, a public university, to diverge from the educational norm of the 18th century by bringing formal pharmacy education to the classroom and laboratory, departing from the largely apprentice model of the profession's earliest established private schools[17]. There exists diversity in many forms among today's 131 pharmacy colleges and schools. Public/private, not for profit/for profit, established/new, comprehensive/teaching focused, faith-based/secular, and some with graduate education and others without. Curricular models also are points of diversity with varied lengths of pre-pharmacy coursework, including explicit requirements for undergraduate degree completion, and academic/calendar year professional degree programs.

The diverse approaches to preparing a doctorally educated pharmacist yield innovations in pedagogy, curriculum design and assessment strategies. AACP benefits as an organization from the free exchange of information and analysis among members and as an enterprise these different experiences and perspectives enrich our meetings, our publications and our ability to make meaningful contributions in our interactions with other health professions education associations. The willingness of members to share innovations with other educators is part of the vibrancy of AACP.

Concerns have been expressed that novel approaches (e.g., distance education pathways, accelerated curricula) may negatively impact the quality of pharmacy education. AACP supports a strong accreditation process that assures all programs meet or exceed explicit criteria of quality and the Association collaborates with the Accreditation Council on Pharmacy Education (ACPE) in numerous ways to guide the evolution of standards and to provide meaningful data and analyses for evidence-based accreditation. The monitoring of enrollment, attrition, student/faculty quantitative measures, pass rates on the national licensure examination and the scholarly activity of faculty are meaningful, but possibly insufficient, measures in an era of increasing expectations for accountability in higher education.

AACP must remain vigilant to insure that the Association and its members fully benefit from the diversity present in the academy. Further, AACP must assure that its programs, projects and services are developed to meet the varied needs of diverse institutions and that any particular sector of the membership does not feel they are underserved because a different type of school seems to receive disproportionate value from their participation in AACP.

AACP must also attend to issues of diversity within the organization's leadership and staff. Again, there are many relevant parameters where diversity exists in AACP. Individual members are diverse on many structural (e.g., discipline, rank, administrative roles) as well

as cognitive parameters. Despite perceptions that certain categories of faculty, notably basic pharmaceutical scientists, do not maintain membership in AACP, 2011-12 President Brian Crabtree presented analyses of membership trends by discipline and reported to the membership that the data do not support that perception[18].

Despite reasonably proportionate membership penetration, AACP does need to insure that our leadership opportunities attract an appropriately diverse group of members. The section structure does engage members by discipline and with that diversity comes some cognitive differences in terms of the nature of teaching, service and research. The addition of the new Section of Administrative Personnel welcomes to the leadership representatives of the growing number and diversity of professional staff in areas such as admissions, communications, finance, development and student affairs. Additional attention should be paid to cultivating additional diversity in AACP leadership, especially with regard to race and ethnicity, disability and other structural and cognitive factors. The newly formed Minority Faculty Special Interest Group will hopefully bring renewed attention to leadership development for groups not historically represented in AACP leadership as fully as would benefit both the individuals and the organization.

AACP currently has a staff of just under 30 individuals, and, currently, about 40 percent have racial/ethnic identities other than white Caucasian. The staff have undergraduate and graduate degrees in many fields of study and bring a diverse array of previous work experience to their positions at AACP. The top levels of management include slightly more women than men. While striving to hire and retain the greatest talent possible to serve members, AACP works to bring diversity to the day-to-day work of the Association with the understanding that it makes our service to members stronger.

CONCLUDING COMMENTS

Colleges and schools of pharmacy must demonstrate dedication, passion and commitment to maintaining organizations that value diversity at all levels. Many in the academy have been fortunate to have traveled throughout the world experiencing vastly different cultures and ways of life. We are reminded that few areas of the world are as diverse as our very own United States.

The Argus Commission believes this has been key to success as a nation despite the many challenging events that have occurred over the 235 years we have been a country. The Commission is concerned, however, with the demographic trends in our population and the implications for an adequate future pipeline of students and faculty with the requisite grounding in science, technology and math. All of the health professions will suffer without adequate attention to and participation in programs to strengthen this element of the US education system. Ultimately, patients will suffer harm if the current trends cannot be reversed.

Understanding cultures and the need to establish diversity within our organizations is key to all levels of success for our students, staff and faculty. Of course, full diversity goes far beyond culture, race, gender, sexual preference, etc. It also encompasses the diverse orientation, education and practice development of our workforce. Respect of others' knowledge base and their contributions to the delivery of patient care is important as well. This suggests that AACP's efforts to help members advance interprofessional learning remains a top priority. Success in building a diverse culture will result in a workforce, in our case pharmacists and pharmaceutical scientists, that will ultimately shape the quality of patient care. True quality will only occur with a strategy of diversity of thought, opinions and action put forth throughout all levels of the institution from the lab, the classroom, settings where patient care is delivered and in communities.

At all times we must be focused and committed to insuring the dignity, safety and respect of all who consider themselves stakeholders of the academy. Though cultural diversity is essential for true success, one must always be reminded that it requires active deliberate attention to foster an inclusive campus culture. Building and maintaining an academic community whose members have diverse cultures, life experiences and backgrounds should be a primary goal for all who are a part of the organization. Though, overall, we have seen significant changes in the makeup of our student bodies, with regard to our staff, faculty, and administrations, we have much more to do. Expansion of the academy's international based programs will further assist in communicating our value of diversity to those served and all who are stakeholders of the academy.

All of our schools and colleges should strive to be model institutions with respect to commitment and clarity of mission with regard to diversity. Achieving true diversity in all dimensions will result in excellence for all who a part of the organization, and, equally important, for those we serve.

POLICY STATEMENTS

Statement 1: AACP affirms the value of diversity and inclusivity in all elements of the academic mission and of the institutional policies and practices that achieve such goals. (Statement was adopted by the House of Delegates in July 2014)

Statement 2: Academic pharmacy strives to develop an increasingly diverse population of pharmacists to serve as part of health care communities and teams that reflect the diversity of the populations served.

(The following amended statement was approved by the House of Delegates in July 2014:

AACP supports the development of an increasingly diverse population of pharmacists to serve as part of health care communities and teams that reflect the diversity of the populations served.

Recommendations

Recommendation 1: AACP should empanel a Task Force on Diversity and Inclusion to advance the Association's and members' diversity goals.

Recommendation 2: AACP should enhance organizational resources (e.g, staffing, research, outreach) devoted to advancing diversity and inclusion among member colleges and schools.

Recommendation 3: AACP should assist colleges and schools of pharmacy in applying evidence-based approaches to achieve diversity goals in student, resident, fellow, faculty and staff recruitment and retention.

Recommendation 4: AACP and colleges and schools of pharmacy should maximize the application of currently available and emerging curricular technologies to enhance students' and faculty members' ability to understand and serve diverse populations.

Recommendation 5: AACP should collaborate with other health professions education associations and member schools on the development of interprofessional education strategies and programs that address key issues of diversity and cultural competence.

Recommendation 6: AACP and colleges and schools of pharmacy should collaborate with other health professions education organizations and colleges of education to expand access to STEM education programs to enrich the pipeline of diverse future health professions students.

Recommendation 7: AACP encourages member colleges and schools of pharmacy to utilize self assessment programs (e.g., Strengths Finder, DISC) with students and faculty that increase participant appreciation of the diversity within the academy and encourage them to utilize diverse strengths and perspectives in advancing the institutional mission.

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