



## **Engaging Communities: Academic Pharmacy Addressing Unmet Public Health Needs Report of the 2004-05 Argus Commission**

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### **INTRODUCTION**

The AACP Argus Commission is comprised of the past five presidents of the American Association of Colleges of Pharmacy (AACP). Its purpose is to scan the environment for the Association and offer its views for AACP action and policy. The Commission also responds to specific AACP Presidential requests for discussion and analysis.

The 2004-2005 Argus Commission was specifically charged to examine how colleges and schools of pharmacy, through efforts of students, faculty, and administrators, are or might be engaged in efforts to form partnerships with communities, broadly defined. Those partnerships with local, state, regional, national and international entities may have many purposes and can be foundational to the common education, research, and service missions of AACP member institutions. As pharmacy is a health care discipline, it is not surprising that the goals of many of these partnerships relate to improving the health of individuals and communities and meeting public health care needs in society. One timely and specific purpose for engaging communities is to enhance the cultural competence of pharmacy students, faculty, and practitioners.

AACP has asserted through publication of the 2004 CAPE Outcome statements that specific competencies in public health are core to the contemporary Doctor of Pharmacy degree program. Through collaboration with the Association of Teachers of Preventive Medicine (ATPM) and the Association of Academic Health Centers (AAHC), AACP has developed a curricular framework to guide the evaluation and evolution of curricula in pharmacy and other health education disciplines in areas of prevention and public health.<sup>1</sup> While it may seem to some that these are new constructs that must be forced into an already over-burdened curriculum, in fact many of the components of the framework are already central to our educational programs and core competencies (e.g., immunization efforts, chronic disease screening and management). At the 2005 AACP Interim Meeting, several schools shared examples of programs related to teaching, service, and research in the public health arena, documenting the significant contributions many schools are already making in tackling unmet needs in our communities.

“Community engagement” is a term not commonly heard at AACP meetings or read in articles in AACP publications. Yet teaching, learning, and discovering new knowledge are in fact acts of community, or academic, engagement because of their potential for shaping society and changing the course of history. “Service learning” is a term more common in pharmacy education, especially as schools have worked to implement early practice experiences and active learning in the professional degree program. Even so, community engagement in its most robust application relates to every aspect of higher education, not just student learning. It relates to our programs of research and service and their relevance to society. Further, community engagement relates to our goals for leadership on campus, in our communities, in public policy, and globally.

Perhaps most fundamentally, as educators our first responsibility is to our students and their learning needs. As noted above, community engagement provides a rich educational backdrop for the learning of cultural diversity, values, and ethics. In “Integrity in the College Curriculum”, a booklet

published by the Association of American Colleges and Universities in 1985, eight essential areas in a baccalaureate degree core curriculum are discussed.<sup>2</sup> While AACCP represents professional schools, these core areas seem to have continuing relevance to students of pharmacy. Two of these core values, ethics and international and multicultural experiences, are specifically relevant to community engagement. Such engagement becomes the context in which the areas of values, ethics, and cultural diversity can be learned or enhanced. Community engagement opens students to a study of values and ethics, provides them with opportunities to experience and understand diversity, and strengthens their understanding of the American experience and contemporary society.

This report offers definitions, examples, rationale, and recommendations related to the agenda of community engagement in pharmacy education. It communicates the fact that pharmacy educators are engaging communities at all levels yet suggests that we have far to go to make our most significant contributions. It touches upon the stresses felt today in both higher education and health care and the unique position pharmacy educators, students, and practitioners find themselves in given the centrality of safe medication use as an issue in health care and public policy.

## DEFINITIONS

There have been significant numbers of local, national, and international study commissions and task forces in higher education charged with studying the concept of community engagement and determining what roles academic institutions play in fulfilling their citizenship responsibilities. It might seem that public universities, especially those with land-grant status, stand out among other types of academic institutions with respect to a responsibility for service to communities. Plater, in his essay on civic engagement in Public Work and the Academy, states that “[n]o college or university is so narrowly focused, so vocationally oriented, or so committed to a particular belief that it does not have an obligation to account for its contribution to sustaining a civil society, contributing to the common good, or improving the human condition through the discovery, dissemination, or application of knowledge.”<sup>3</sup>

Each of the terms identified below have been studied and defined by numerous study commissions and scholars. The Argus Commission has selected the definition in each case that seems most related to the focus of the Commission’s work and germane to the pharmacy education community.

Community engagement – the application of institutional resources to address and solve challenges facing communities through collaboration with these communities. These resources include, for example, the knowledge and expertise of students, faculty, and staff; the institution’s political position; campus buildings; and land. The methods for community engagement of academic institutions include community service, service-learning, community-based participatory research, training and technical assistance, coalition-building, capacity-building, and economic development.<sup>4</sup>

Academically engaged institutions – institutions that have redesigned their teaching, research, and extension and service functions to become even more sympathetically and productively involved with their communities, however community may be defined.<sup>5</sup>

Service-learning – a method under which students learn and develop through thoughtfully-organized service that: is conducted in and meets the needs of a community and is coordinated with an institution of higher education, and with the community; helps foster civic responsibility; is integrated into and enhances the academic curriculum of the students enrolled; and includes structured time for students to reflect on the service experience.<sup>6</sup>

Community-based participatory research – a collaborative approach to research that equitably involves members of the community and academic researchers.<sup>7</sup>

Cultural competence – cultural and linguistic competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations. “Culture” refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups. “Competence” implies having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities.<sup>8</sup>

Cultural competence in health care – the ability of systems to provide care to patients with diverse values, beliefs, and behaviors, including tailoring delivery to meet patients’ social, cultural, and linguistic needs.<sup>9</sup>

Public health – the art and science of safeguarding and improving community health through organized efforts involving prevention of disease, control of communicable disease, application of sanitary measures, health education, and monitoring of environmental hazards.<sup>10</sup>

### **CURRENT EXAMPLES FROM ARGUS MEMBER INSTITUTIONS**

The Argus Commission members shared anecdotal knowledge of relevant examples of community engagement from many schools and colleges of pharmacy. They could best describe examples of academic engagement on-going at their own institutions and offer them as the beginning of an inventory of projects taking place at various levels.

#### Local projects

Ohio State University (OSU) has defined “Outreach and Engagement” as a meaningful and mutually beneficial collaboration, partnering education, business, and public and social services. The Outreach and Engagement mission of the OSU College of Pharmacy is “To identify community needs that would benefit from the knowledge and skills unique to pharmaceutical sciences and the profession of pharmacy, and to identify appropriate partnerships where synergistic missions and goals exist to serve our community.” Faculty, postdoctoral fellows and residents, and students contribute to this mission by educating the public; discovering, disseminating and applying the knowledge to enhance public health; developing and implementing pharmacy practices to improve medication access, effectiveness, and safety for patients; and, engaging in service-learning activities to enhance academic experience and cultural competence, and foster civic responsibilities and active involvement with the community. Examples of these efforts include partnerships with Columbus Neighborhood Health Centers (CNHC) to improve medication access and health outcomes for the indigent adults and pediatric populations at five community-based health centers; Catholic Social Service to offer medication education to the low income elderly living in apartments; Cardinal/Life Care Alliance to provide pharmaceutical care for the home-bound elderly; two ambulatory clinics and Kroger Patient Care Centers for wellness and disease management; churches and retirement communities to provide medication reviews; local schools to educate children about the safe use of drugs; and Columbus Health Department, community pharmacies, and Faith Mission free clinic to offer disease prevention education and immunizations. These partnerships have led to improved medication access and use, decreased emergency room visits and hospitalizations, and enhanced quality of life for patients.

The ENABLE Community Health Worker Program (CHW) Program, based in the University of Maryland, School of Pharmacy, was founded in 1991. The mission of ENABLE CHW is to serve community residents, to enable them to improve their health outcomes through home-based

individual care, case management, education, monitoring, and follow-up. Dr. Donald Fedder, Professor at the University of Maryland, School of Pharmacy, created the ENABLE Community Health Worker Program as a way to address the problem of an increasing number of uninsured and underinsured residents of West Baltimore using emergency rooms as primary care facilities. During the first three years ENABLE recruited and trained five classes of part-time volunteers, who provided outreach services to patients with diabetes and high blood pressure who were identified from University of Maryland Medical System discharge lists. In 1994, the program secured Corporation for National Service (CNS) funding, and was funded for nine years as an AmeriCorps national service program. The use of AmeriCorps members as full-time CHWs allowed the program to expand and to place full time CHWs in adult clinic sites, and to expand to address chronic health care needs in children, such as asthma and lead poisoning. In 2003 ENABLE successfully transitioned to the use of paid staff to provide outreach services, and expanded to include outreach to faith-based sites.

The success of this program is attributed to some key factors. This program is based on the Chinese Barefoot Doctor Model, and utilizes a strong peer-support system to offer health outreach services. Because the CHWs are from the community they serve, they are accepted and trusted by the clients. Additionally, this program uses a home-based model to offer services. CHWs go to the homes of their patients, and this provides them the ability to gain the trust of patients, monitor them in their own environment, and identify other environmental and social issues that may have an impact on successful outcomes. The CHW provides intensive outreach, advocacy and education services, one client at a time, in the clients' home. ENABLE CHWs have assisted hundreds of patients, *reducing emergency room visits by 40% and hospitalizations by 33%*. A recent study estimated a 27% reduction in Medicaid reimbursements, an average of \$3000/patient. The results from this study are published in *Ethnicity & Disease, Winter 2003*. Dr. Fedder has offered a service-learning course, called *Introduction to the Community*, to pharmacy students. This course pairs students with CHWs in the field, and allows the student to have a real world understanding of the community they will serve. ENABLE is a model for the use of peer support to improve health outcomes and quality of life in impoverished communities, and for establishing and successfully operating community outreach programs.

#### State/national projects

Auburn University, including the Harrison School of Pharmacy, has made a commitment to reach into the lower socio-economic counties in Alabama, known as the Black Belt, and begin the challenge of addressing unmet needs, many of which involve public health issues. The Black Belt is so named because of the color of the rich, fertile soil found in these counties. Faculty and students from the Harrison School of Pharmacy assist with medication assistance programs, provide medication therapy management in association with mobile clinics, practice pharmaceutical care in federally-funded community health centers, and conduct health fairs in several underserved communities. These programs have been conducted in conjunction with other service organizations and agencies in an attempt to improve the quality of life for Alabama citizens in these counties. Much will need to be done over an extended period of time. Current and future short-term and long-term projects are providing faculty and pharmacy students opportunities to develop a sense of responsibility towards meeting the needs of less-fortunate individuals.

The University of Mississippi School of Pharmacy collaborated with the Aaron E. Henry community Health Services Center in Clarksdale, MS to submit a proposal entitled "Effective Pharmaceutical Care in the Mississippi Delta: A Demonstration Project." The grant, which was submitted to the Office of Pharmacy Affairs in the Health Resources and Services

Administration, was designed to demonstrate an innovative method of providing pharmacy services to patients served by the community health center and to help the community health center expand access to low cost drugs and care for their patients. This would improve primary care services for uninsured and underserved citizens in the Mississippi Delta. The School of Pharmacy educated pharmacists already living and working in the Delta to deliver much needed patient-centered, clinical services to asthmatic and diabetic patients. Pharmacists were also made aware of contractual opportunities to provide medications at federally negotiated 340B prices to the patients of the community health center. Pharmacists were educated to explore and resolve therapy-related problems, and they were integrated into the primary care team through provision of disease state management and cognitive services. The five participating pharmacies entered into contractual agreements with the community health center to provide low-cost medications and services at a location convenient for the patients. On site coordination of patient referrals and service was provided by a part-time clinical pharmacy coordinator.

### International projects

Creighton University has offered students the opportunity to engage in international health professions outreach in the Dominican Republic since 1978 through the Institute for Latin American Concern (ILAC). The goal of the various ILAC programs is to enhance the quality of life of underserved Dominican populations through the provision of immediate, basic health care services, while providing health care professionals and students the opportunity to reflect on their ability and obligation to make a positive difference in an often harsh “world reality”. All of Creighton’s health professions programs participate in the ILAC programs. Teams of health care providers spend several weeks at various times throughout the year in the health facilities of Santiago and/or in remote village “campos”, providing care with donated supplies and often in makeshift clinics.

Pharmacy students must apply to participate in the ILAC Summer Program. Successful P4 students spend five weeks and earn clerkship credit for their work. An elective course, “Spanish for Health Professionals”, is recommended for anyone not familiar with the language. The journey begins with a late spring retreat where participants get to know one another and reflect on their motivations for, and expectations of, the experience. In Santiago, students engage in a short, intensive Spanish language program before being grouped into health care teams and assigned to a campo. Students live with a Dominican family and become fully immersed in the activities, culture, lifestyle, joys and needs of these remote communities. Students devote their time to clinic service and cultural immersion/guided reflection activities. Every two weeks participants return to the ILAC Center in Santiago to reflect on their experiences with other teams and to explore the city and its surrounding barrios.

No one comes back from the ILAC experience unchanged. Most participants are humbled by the depth of their professional and spiritual growth, more appreciative of the gifts that surround them in their everyday life, more self-aware, and more highly motivated to engage in additional service outreach in their own communities. Many speak to the strong sense of family that pervades the remote Dominican communities, the generosity of the campesinos, and how the people find joy and contentment in the face of unspeakable poverty. Student selecting an ILAC experience better understand the global health needs of people living in countries where basic health care services are lagging or absent altogether, and how their own actions can make a difference in the lives of so many. More information is available, including a slideshow from the 2004 pharmacy summer ILAC experience and student testimonials, at: <http://pharmacy.creighton.edu/ilac>.

## **RATIONALE AND FRAMEWORK FOR COMMUNITY ENGAGEMENT**

On July 4, 1999, 500 university presidents issued the Presidents' Declaration which concludes with the following statement:

We believe that the challenge of the next millennium is the renewal of our own democratic life and reassertion of social stewardship. In celebrating the birth of our democracy, we can think of no nobler task than committing ourselves to helping catalyze and lead a national movement to reinvigorate the public purposes and civic mission of higher education. We believe that now and through the next century, our institutions must be vital agents and architects of a flourishing democracy.<sup>11</sup>

This was neither the first nor last such declaration in higher education signaling the need for academic institutions to renew important connections to communities through civic engagement. More recently participants of the 2004 Wingspread Conference released a paper entitled "Calling the Question: Is Higher Education Ready to Commit to Community Engagement?"<sup>12</sup> Participants in this conference noted that previous calls to action have not "produced a flowering of transformed institutions" and that engagement has not become "the defining characteristic of higher education's mission nor has it been embraced across disciplines, departments, and institutions."

An increasing body of scholarship demonstrates the benefits to both communities and academia from engagement programs and projects. Case studies are replete with suggestions on forming partnerships and integrating engagement into the fabric of our academic enterprise. Despite this, the 41 participants at the 2004 Wingspread Conference noted that the institution-wide effort, deep commitment, and leadership are still lacking and transformation of our nation's colleges and universities into truly engaged organizations is still needed. Participants "believe that engagement is the best hope for the future of higher education." Failure to deliver in regard to effective community partnerships will continue to erode public appreciation for the value of the investment in higher education. In an era of increasingly scarce resources higher education cannot take this risk lightly.

Why is the timing so important right now at the beginning of the 21<sup>st</sup> century? There are answers to that question at every level of our enterprise: teaching and learning, discovering and applying new knowledge, and outreach and service. We live in a more global and diverse world than ever before and with that comes opportunities and tensions unlike any we have previously experienced. The downturn of the U.S. economy in 2001 set in motion the most significant decrease in public funding for higher education in generations. Now that the economy seems to be on an upswing, the budget battles at both the state and federal levels for the few discretionary dollars available for education are made more ferocious because of the continued escalation of health care costs related to our aging nation and the growing number of employers retreating from their historical coverage of employees' health insurance. Public health issues like obesity, concerns about pandemic infections, emergency preparedness, and the rising incidence of chronic disease await effective strategies and interventions.

These are all highly germane to pharmacy education. Medications have assumed significance in health as never before. They are mainstream treatment for most acute and chronic conditions. Expenditures for medications, once a minimal component of overall health spending, are now the second or third highest expenditure in most public and private health systems. The incidence of medication misuse and the cost to society of inappropriate medication use and oversight is a central theme in public policy related to health care.

Educators can not afford to overlook these issues as if they don't impact each one of us. Instead we must look anew at the opportunities these challenges produce and how, through effective community engagement, higher education, and pharmacy educators specifically, can be recognized as valuable

partners in efforts to address unmet community needs. The failure to do so will guarantee that the public, and public officials they elect to govern and allocate resources, will perceive the relevance and value of post-secondary, professional, and graduate education as diminishing at an accelerating pace.

### Educating Tomorrow's Professionals

Part of the engagement equation relates to the education of today's students. In an essay on being a generally educated person, Jerry Gaff from the American Association of Colleges and Universities notes that liberal and general education is an essential component of moving from an industrial to a knowledge-based economy where many people work on solving unscripted problems. While in the industrial era the major, or professional preparation, was more highly valued, "a contemporary liberal or general education may be the most useful career preparation for the knowledge-based economy."<sup>13</sup> Pharmacy educators must find a comfortable balance between the obvious demands for professional preparation of a medication use specialist and the general preparation of a professional who is prepared to contribute significantly to the health of society in one or more meaningful roles.

The subject matter taught in schools of pharmacy, in addition to being important clinical and scientific content, lends itself to be the context for developing the general education skills of our students. As examples, a geriatrics rotation could be "liberalized" to include readings and case studies on end-of-life decision-making or students at varied points in the curriculum could engage with older adults at senior centers and provide timely information on health promotion and disease management topics. Reflective writing and small group discussions on the cultural, ethical, socioeconomic and other issues encountered are excellent learning opportunities that challenge and prepare students to contribute as professionals to their communities.

Gaff continues that the diversity of our country is far greater than it has ever been. This, plus our need to engage as a country in global affairs in matters that include health care and social justice, requires that education at all levels equips students to understand the similarities and differences among people. We must "develop the capacities to bring different people together to solve problems, whether in the workplace, one's community, or internationally."<sup>13</sup>

This is why service learning is so central to professional education and the preparation of tomorrow's pharmacy professionals. Our curricula overflow with the content we are convinced a contemporary graduate must have to be competent. However, all that knowledge is "degraded" if students do not have the cultural competence and ethical foundation to apply their knowledge and skills to a diverse patient population or community. We must help our students see the challenging issues confronting every aspect of society and draw out in them a sense of purpose that, as a learned professional, they have a moral responsibility to engage communities in meaningful ways to resolve community problems.

It is not sufficient to simply note that we must work to insure cultural competence in our students and the future health professions workforce. Slovensky and Paustian, writing about diversity in teaching health administration students, state: "Not only must faculty incorporate relevant instruction and experiential activities in the curriculum to prepare program graduates to function effectively in a diverse workplace, they also must be prepared to deal with the diversity issues they encounter in their classrooms and other work relationships. Additionally, they are expected to model appropriate attitudes and behaviors for students."<sup>14</sup>

Pharmacy educators must also understand important "pipeline" issues on the horizon. Higher education is not the only portion of the educational enterprise that has experienced significant funding pressures in the last several years. More serious, systemic issues threaten K-12 educational systems. Shortages of teachers, especially those equipped to stimulate student interest in and adequately teach math and science, approaches a national crisis with estimates that only get worse five and ten years from now. Problems of education system structure and financing are worst in areas with the highest current and fastest growing minority populations. Projections regarding the relative growth of such populations coupled with the deficiencies in the education system foretell significant pipeline problems for all disciplines that require a strong foundation in math and science, among those the health professions.

It is here with respect to our core educational objectives that issues of community engagement, cultural competence, and service learning find an intersection and raise important questions. What responsibility do health professionals and health professions educators have for activities and advocacy that aim to enrich math and science education at various points along the continuum of preparation? Are our students, faculty and alumni adequately prepared for and engaged in culturally competent programs of outreach to make contributions to secure the pipeline among all students, whether majority or minority, for the foreseeable future? Initiatives such as the recently expanded University of Southern California School of Pharmacy program which provides science discovery outreach to elementary school children in East Los Angeles should be studied and disseminated to other geographic locations by pharmacy educators.<sup>15</sup>

There is also an intersection between issues of engagement, cultural competence, the public health needs of various populations, and our clinical practice and education programs and services. AACP recognizes both the historical engagement with and growth in college and school-based practices in community health centers, public health departments, and other organizations that constitute the health care safety net. These are especially important learning environments for our PharmD students and rich platforms for faculty patient care practices that have transformational potential with respect to helping some of the most vulnerable in our communities find access to medications and medication therapy management services.

An analysis of the impact of clinical pharmacy demonstration projects like the Mississippi Delta project described in the introduction, which were funded through the Office of Pharmacy Affairs at HRSA, reveals that colleges and schools of pharmacy made significant contributions to the success of these projects. This was true structurally in terms of the ability of the sites to integrate meaningful clinical pharmacy services into the community health center. It was also true clinically in that significant improvements in outcomes of health care were measured in the patient populations reached with these services.<sup>16</sup>

### Discovery and Application of New Knowledge

There are also important questions to raise regarding the intersection of academic engagement and our research activities. Without question the pursuit of new knowledge through research is highly valued and rewarded within higher education. Original peer-reviewed publications and a sustained track record of competitively funded research efforts are requisites for promotion and tenure in most of our institutions and especially those that are research intensive or comprehensive educational institutions. AACP is on record at numerous points across time with the belief that all faculty should be scholars.

Faculty at schools and colleges of pharmacy have fared quite well during the era of increased funding from the National Institutes of Health. NIH funding of pharmacy faculty increased 123 percent over the eight year period AACP has obtained and analyzed this research-related benchmark at member schools. Pharmacy faculty in recent years have been awarded more NIH support than counterparts in dentistry, nursing, and veterinary medicine. These efforts are laudable and important to sustain yet there is evidence that the public does not always appreciate the significance of such work. This lack of understanding could, if not addressed, make sustained support vulnerable at the state and federal levels.

In the context of a discussion related to research and community engagement, it is also important to ask whether an appropriate balance can be struck between the types of research historically funded by NIH and other federal funding agencies and research captured by the term “community-based participatory research”. Such research is particularly germane to analyses of the actual use of medications in community-living populations which does not lend itself perfectly to the classic randomized controlled design. Explorations of differences in health-seeking behaviors in various populations and of the intersection between health literacy and medication use are additional examples of timely and important research areas that might fall under the community-based participatory research umbrella. So too might specific health policy analyses related to how health benefit design and health services access vary across multicultural populations and groups. Given the centrality of medication use, and increasing concerns

about affordability and safety of medications, pharmacy faculty have an important role to play in advancing such translational and applied research.

Richard A. Cherwitz recently prepared an essay as part of the University of Texas – Austin project on academic engagement.<sup>17</sup> He notes the challenges facing educational institutions, particularly public research universities, whose scholars have found success in pursuing increasingly narrow, highly theoretical, often independent research questions. Funding, especially in the biomedical arena, has been most plentiful for basic rather than applied research. The public commitment in this regard has been expressed in the doubling of the NIH budget over a five-year period. Related issues and an in-depth discussion of the implications of NIH priorities can be found in the 2004-2005 report of the AACP Research and Graduate Affairs Committee.<sup>18</sup>

The new world order, Cherwitz posits, requires an increased commitment to and removal of barriers preventing collaborative, interdisciplinary, socially relevant research and learning. This will, in turn, promote public confidence, generate revenue, and open doors of universities to a more diverse population. He cites examples from his own campus of a critical mass of faculty who embrace these concepts and function as “intellectual entrepreneurs”. They are individuals who exemplify academic engagement as they seek both to discover and put to work knowledge that makes a difference. Examples include a neurobiologist and pharmacologist struggling to bring personal and public policies in line with scientific knowledge about alcohol addiction and a philosopher helping to increase the role of ethics in corporate decision making.

To be both sensitive to and effective in addressing community needs, investigators must access data and information that helps characterize the issues and problems confronting a given group or population. Sources of data are available from public health departments, state extension services, governmental and nongovernmental organizations, and certain advocacy organizations. The website of the American Public Health Association ([www.apha.org](http://www.apha.org)) provides links to the departments of public health of every state and major county in the country. The Campus Community Partnerships for Health site [[www.depts.washington.edu/ccph](http://www.depts.washington.edu/ccph)] is also a rich repository of information and links to programs which aim to strengthen the relations between academicians and the communities that they might engage.

In his essay Cherwitz<sup>16</sup> asks significant questions about the daunting challenges confronting universities working to ignite intellectual entrepreneurship as a component of academic engagement. In essence he asks the “how” questions: how can faculty integrate, synthesize, and unify knowledge to address complex problems rather than pursue increasingly narrow research questions? How can incentive systems (e.g., promotion and tenure and funding models) be aligned with the needs for different types of scholarship without interfering with important aspects of traditional academic excellence and productivity? How can faculty maintain standards of academic integrity and objectivity, while participating in community projects in which they may become ideologically vested, serve as change agents or directly profit?

Without question there are issues regarding the structure and delivery of health care, development of and access to life-saving medications and other therapies, information transfer, and patient empowerment that beg for investigation by scholars in our nation’s pharmacy schools. In addition there are emerging ethical issues and other issues related to public policy that requires analysis and the scholarly contributions of our knowledgeable faculty, graduate students, and fellows. A serious examination of our relative strengths and models of collaboration in key areas related to drug development, appropriate use, and policy is warranted.

### The Service Dimension

Ernest Boyer, in *Scholarship Reconsidered: Priorities for the Professoriate*, stimulated a new appreciation of the impact faculty and students can have when they apply their expertise in new and creative ways in partnership with communities.<sup>19</sup> Certainly the dimension of service, also often characterized simply as outreach, is well made for this aspect of community engagement. There is also a very strong case to be made for approaching this aspect of engagement in a serious and scholarly way.

Pharmacy faculty provides significant amounts of service at every level of analysis. Examples provided at the AACP Interim Meeting in 2005 included on-campus health screening and wellness programs, community outreach to senior citizens, national smoking cessation activities, and these simply scratched the surface of all the community serving programs designed and delivered by faculty. Over the years, US pharmacy faculties have offered a significant amount of consultation to nongovernmental agencies, such as the World Health Organization, and to specific countries which bring inquiries related to enhancing their pharmacy education and medication use systems.

Gayle A. Brazeau made a significant contribution to the analysis of where pharmacy schools and other academic institutions are in recognizing and rewarding service in her statement entitled, "Revisiting Faculty Service Roles- Is 'Faculty Service' a Victim of the Middle Child Syndrome?"<sup>20</sup> She notes that our definition of service is so diverse and our ability to distinguish service in some cases from our teaching, clinical practice, and research activities so lacking that an appreciation of the value of service in the total academic portfolio is difficult to achieve.

Her concerns are mirrored in the work of the Commission on Community-Engaged Scholarship in the Health Professions, founded in October 2003 with funding from the W.K. Kellogg Foundation. The Commission was founded to take a leadership role in creating a more supportive culture and reward system for community-engaged faculty in the nation's health professions schools. An update on the Commission's work was included among a rich assortment of papers on community engagement in medicine published in the April 2005 issue of *Academic Medicine*.<sup>21</sup>

The Commission communicates that, to be successful, faculty members' community-based service must be aligned with institutional mission and must be approached in a scholarly way.<sup>20</sup> The article also lays the groundwork for the important aspect of assessing community engaged scholarship, whether related to teaching, research and especially service activities. The authors claim that many of the products of such engagement are similar to those that meet the traditional standards (e.g., publications in peer-reviewed journals, grants) yet note that there are important methodological and other differences that must be taken into account when assessing community-based activities.

The article ends with reference to the recently announced Department of Education grant from the Fund for the Improvement of Postsecondary Education awarded to the Community Campus Partnerships for Health. CCPH will work with 10 health professions schools over the next three years on efforts to recognize and reward community engagement as central to the role of faculty members at their own institutions and nationally. Auburn University Harrison School of Pharmacy, University of Colorado School of Pharmacy, and the University of Minnesota Academic Health Center are among the 10 participating schools. There are also pharmacy schools co-located at three of the other institutions involved in the FIPSE-funded project.

### The Global Dimension

Issues related to the interaction between US pharmacy faculty and the global community cut across the dimensions of education, research, and service and warrant separate consideration. As noted in the introductory paragraphs, we live in an increasingly global "village" where information and expertise can be shared seamlessly. Our health status and economic interdependence are intertwined like no other time in recorded history.

Many pharmacy schools maintain active programs of collaboration with pharmacy educators and researchers in other countries and offer consultative services to a variety of public health-related organizations. Some of these linkages are highly formalized, with possibly the best and most robust example of education and research collaboration found in the US/Thai Consortium project begun over 10 years ago. Students at many US schools and colleges of pharmacy are encouraged to embark on international rotations and there are several US schools that offer professional degree programs leading to the PharmD degree to students in other countries.

What then are the opportunities, and responsibilities of US schools and colleges of pharmacy in the context of global health care and medication use issues? A comprehensive answer to that question could occupy an entire Argus Commission Report. The 2004-2005 Argus Commission began its work by

attending a forum on pharmacists' contribution to global health convened by the Howard University Pharmacist and Continuing Education (PACE) Center. Entitled "Pharmacists & Pharmacy Leadership: Making a Difference in Global Health", the program featured speakers from the Global Health Council, FIP/Pharmabridge, international pharmacy educators, and national association leaders. Once again, the centrality of medication use in quality health care dominated the discussion, and the differences in terms of disease burden and access to health products and pharmacists services between developed nations and developing and transitional countries were profound.

There is no one existing conduit that would help pharmacy educators channel their global contributions in an organized fashion. AACP is one of the few national organizations found in the world that represents both faculty and administrators in pharmacy education, although there are established groups of pharmacy educators in Canada, Europe, and more recently Mexico and Asia. AACP has collaborated with pharmacy educators in Central and South America for over 15 years as those countries have explored and debated the appropriate level(s) of professional education for pharmacy practitioners in these regions. The Federation Internationale Pharmaceutique (FIP) has an academic pharmacy section and several US educators have provided leadership to FIP through this and other sections. An informal Forum on Quality in Pharmaceutical Education has held meetings for the past several years just prior to the FIP meeting. The decision by the AACP Board of Directors to provide open access to the *American Journal of Pharmaceutical Education* is, in and of itself, a major contribution to the international pharmacy education community.

Effective academic engagement internationally requires the same ingredients for success that have been noted for other community engagement efforts: alignment with institutional mission, a deep understanding of local community needs, adequate and sustained resources, and a commitment to approach the effort in a scholarly fashion in order to contribute not only time and talent but to expand the bodies of knowledge about the impact of specific interventions on the well-being of the communities served.

## CONCLUSIONS

For pharmacy educators it may seem like the perfect storm: workforce concerns about having the right number of pharmacists for the future leading to increased enrollments in current and emerging schools and colleges, upward pressures for accountability in higher education coincident with decreases in fiscal support from public sources, and the need to generate teaching, research, service, and patient care programs that maximize the positive impact of medications and minimize their harmful or ineffective use. While seemingly overwhelming, perhaps the silver lining in the clouds is that the defining element of success in the storm is the single term **relevance**. Medication use and the role of pharmacists, our research, and service activities are more highly relevant to society today than ever before.

AACP is highly committed to enabling efforts that expand academic engagement in education, research, and service locally, federally, and internationally. To begin, AACP will construct a comprehensive inventory of the amazing array of on-going programs at member institutions. These can then be used to alert others to similar opportunities and as the basis of our advocacy work for more support and a broadened network of community partners.

## POLICY STATEMENT AND RECOMMENDATIONS

**POLICY STATEMENT 1:** Students, faculty and practitioner educators should work to achieve cultural competence and to deliver culturally competent care as part of their efforts to eliminate disparities and inequalities that exist in the health care delivery system.

**RECOMMENDATION 1:** AACP should develop a template for documenting the engagement of member institutions and faculties with partners at the local, state/national, and international levels and maintain an inventory of such activities to be used in teaching, collaborative research and service, and advocacy programs.

**RECOMMENDATION 2:** Each school and college of pharmacy is encouraged to examine its mission and strategic objectives related to engaging communities in socially meaningful ways and to identify additional programs through which students and faculty can strengthen community engagement, especially in underserved communities.

**RECOMMENDATION 3:** AACP should expand efforts to stimulate funding for education, research, service, and clinical practice initiatives which address health disparities.

**RECOMMENDATION 4:** The 2005-06 AACP Argus Commission should include in its charge an examination of strategies to address deficiencies in math and science education in the K-12 pipeline and propose how pharmacy educators can collaborate with other stakeholders on efforts to address the identified problems.

**RECOMMENDATION 5:** Colleges and schools of pharmacy should work to create additional opportunities for faculty placement and student experiential learning in community health centers, public health clinics, and other safety net practice environments.

**RECOMMENDATION 6:** The Council of Deans task force on metrics of scholarly activity should specifically examine and make recommendations related to recognition of interdisciplinary and collaborative research activities addressing community engagement and public health issues.

**RECOMMENDATION 7:** AACP should investigate with interested member institutions and faculties the development of a multi-institutional policy analysis program to meet the needs of local, state, federal and international policymakers for pharmaceutical public policy analysis and expertise.

**RECOMMENDATION 8:** AACP should invite leaders in the effort to recognize and reward community engagement to present their work in a variety of formats and venues, and encourage member institutions to incorporate recommendations from the project into faculty evaluation activities.

**RECOMMENDATION 9:** AACP should identify effective means to facilitate connections between international communities, schools and colleges of pharmacy, consortia of pharmacy educators and individual faculty in the United States to enhance education, research and service collaborations related to community engagement and public health.

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