Introduction

This document addresses the requests made in the June 16, 2008 memorandum from Provost Hay regarding college plans for achieving student, faculty, and philanthropic success and extending community engagement and outreach in alignment with Strategic Directions as articulated in The University of Arizona Five-Year Strategic Plan 2009-2013. Per request, we also provide a narrative describing the context in which the college currently operates.

We preface this document with the additional information that the College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education (ACPE), which requires that colleges publish their mission, goals and values and conduct strategic planning that involves multiple stakeholders. The college, in preparation for its 2010 re-accreditation review, had just initiated a discussion to determine new strategic planning processes and timelines when the provost made her request to UA colleges. To enable the college to meet the provost’s deadline for benchmarks, a small committee of faculty, staff and student representatives developed the information below and the draft revisions of the COP Vision, Mission, Values and Goals document that is added as an appendix, incorporating suggestions from the Pharmacy faculty. We expect, however, that the wording and perhaps even priorities, will change as we implement a planning process in the months ahead, per ACPE guidelines, that engages many more stakeholders in a more thorough discussion. The appendix is therefore a fluid and evolving “work in progress.” The measures provided in relation to the UA Strategic Directions represent benchmarks agreed by college faculty through its shared governance system, and are reasonable indicators of success toward the provost’s stated directives.

About the college

The College of Pharmacy is the most firmly established of the four colleges that make up the Arizona Health Sciences Center at The University of Arizona. Founded in 1947, we were the first health sciences college on the campus, and during our six decades, have risen to a national prominence within our discipline not yet equaled by other AHSC colleges. In America’s Best Graduate Schools 2006, U.S. News & World Report ranked our professional (Pharm.D.) program at number 4 among the nation’s pharmacy schools, based on a peer opinion survey. The college was seventh in the country among colleges of pharmacy in the total amount of NIH grants and contracts awarded in FY 2006 and FY 2007. In our 60 years, we have grown from modest roots to an academic leader well respected for excellent professional education, graduate education and research activities in pharmacology, toxicology and the pharmaceutical sciences. Our vision is to be the preeminent college of pharmacy in the country for pharmacy-related education, research, service and patient care.

During the past five years, the college has focused largely on progress on the following initiatives:

- Expanding our Pharm.D. enrollment to assuage the state and national shortage of pharmacists without diminishing the quality of the program,
- Recruiting new faculty both to support the growing professional program and extend the research enterprise, and,
- Since the creation of the Phoenix Biomedical Campus by the Arizona Board of Regents, establishing Phoenix-based academic and research programs.

We have achieved measurable success in each of the above areas, and can boast significant accomplishment in our mission: To provide outstanding professional and graduate education, generate and expand pharmaceutical knowledge, optimize health and improve quality of life in a dynamic and global community. Our achievements in regard to mission and the strategic directions of The University of Arizona are described at length in the College of Pharmacy Annual Report 2007, presented to the provost in February 2008.

Maintaining the level of excellence faculty and students demand of a top-tier institution is always challenging, and has been especially so in recent years. The two major challenges that have influenced our setting of 2009-2013 goals and strategies are below.

**Financial resources**
Funding uncertainties and rescissions have plagued the university for several years, and have affected nearly every element of enterprise in our college. We have been able to expand the Pharm.D. enrollment during a period of budget cuts largely by increasing differential tuition for professional students. This method of increasing revenues is not limitless, however, and we recognize that even when our registration costs are below those of some peer institutions and state competitors, the expense may still be beyond the reach of many qualified prospective students. Limited funding also negatively impacts faculty recruitment and retention, and, despite ongoing efforts to make salaries more competitive, we expect to continue to struggle in attracting and retaining the most productive faculty, especially those in high demand and highly specialized sub-disciplines. Funding issues also surround the development of programs for the Phoenix Biomedical Campus. Our phased plan for developing postgraduate, graduate and Pharm.D. programs in Phoenix is just in its second year of funding, yet has already received a funding reduction (from proposed) that postpones full implementation of the plan by at least a year. Moreover, the lack of long-term funding commitment severely affects our ability to recruit expert faculty to new Phoenix programs, which may cause further delays.

**Physical Facilities**
Available funding has also severely restricted our ability to upgrade existing laboratory facilities and offer state-of-the-art labs and equipment to prospective faculty, further impinging on our faculty recruitment and retention success. Adequate research space has been a longstanding issue on the Tucson campus: currently 35 faculty labs or core facilities are located within College of Pharmacy buildings, while 23 others are in other facilities. Our associate dean for research calculates that 77 total laboratories (19 new) are needed in Tucson to accommodate current Pharmacy faculty, their core facilities, and the new faculty approved for recruitment over the next five years.

While addressing the research space exigency will be a primary concern of Tucson planning, facilities issues also will affect development of Phoenix programming in a substantial way. The college will continue active involvement in the planning for
ABC2 and the health sciences education building on the Phoenix Biomedical Campus. The direction of future Pharmacy programs there will be at least in part determined by space available for education, research and patient care; the implementation of Pharmacy programs, especially Pharm.D. education conducted in an interdisciplinary format, is intrinsically tied to appropriate buildings being completed on schedule.

The College of Pharmacy takes pride in its past and its ongoing accomplishments; its strategic plan is committed to overcoming the resource challenges noted above and to extending its achievements well into the future. Recent indicators provide incentives for us to move quickly on many fronts to maintain our claim to excellence and regain momentum toward preeminence. In America’s Best Graduate Schools 2009, the UA College dropped to number 9 in the national pharmacy education rankings. Our actual score in the peer survey dropped only slightly, from 4.1 to 4.0, but five other institutions improved their scores in the three-year interval between surveys, and three newcomers climbed into the top five. Another example of the extremely competitive external environment is found in our NIH rankings. Though we posted at seventh place in grants and contracts awarded to pharmacy schools in both 2006 and 2007, in actual dollars, grants to the College of Pharmacy totaled $1.6 million less in 2007. Clearly, even though we have much to boast of within our college, we must develop effective strategies to remain top tier in education, research, and patient care, and an influential voice in healthcare policy.

**College of Pharmacy’s Response to Stated Directives**

*Demonstrate increased student success, including how unit advances the University’s diversity goals and the University’s commitment to embedding the outcomes of student assessment into continual improvement of our programmatic activities.*

This directive correlates closely to the college’s goal to recruit, support, and educate the best students, from diverse populations, to become outstanding pharmacists and scientists (Goal 1 in Appendix A).

We will employ the following strategies and measure achievement in this area in the following ways:

- Continuously refine admissions processes and set admissions benchmarks reflecting high standards for student performance and broad assessment of candidates’ likelihood for success in professional and graduate programs.
- Maintain current programs to interest K-16 students in science and health professions; maintain and develop, as resources permit, programs targeted to underrepresented minority populations.
- Target in-state recruiting for prospective prepharmacy and pharmacy students in schools and other organizations with high Hispanic population.
- Invest in graduate recruitment efforts and graduate student stipends that make the college competitive for the nation’s best students.
- Develop and implement surveys to measure student engagement; conduct alumni surveys to assess level of preparedness for first post-graduation pharmacy employment. Include results of surveys in the ongoing review and revision of curriculum content, teaching and learning processes.

Metric: Annually track 5-year admission data for Pharm.D. and Ph.D. applicants, including GPA, PCAT/GRE, ethnic background, age, gender, acceptance rate.
Metric: Number of prestigious graduate student fellowships, professional society awards and postdoctoral training grants to graduate and professional students.
Metric: Number of Pharm.D. graduates entering residency programs.
Metric: Number of alumni reporting being highly satisfied regarding preparedness for job responsibilities within 2 years of graduation.
Metric: Number of students who report being satisfied or highly satisfied with their experiences at the college.

Advance faculty success, including how unit will contribute to the University’s diversity goals, and how unit will increase extramural funding and/or national recognition of the faculty’s creative and research endeavors.

This directive correlates to elements embedded in the following college goals:
- To enhance the leadership role of the College of Pharmacy (Goal 2 in Appendix A).
- To promote optimal health for individuals and communities by creating and translating new knowledge (Goal 3 in Appendix A).
- To achieve an environment and culture the supports diversity and the aspirations of the college community (Goal 4 in Appendix A).

Success in securing extramural funding is directly related to the local investment in the research enterprise, including investments in faculty recruitment and retention. The college has an outstanding record of producing a return on local investment. The outcomes of metrics will therefore be largely determined by the degree of local support.

We will employ the following strategies and measure achievement in this area in the following ways:
- Establish a critical mass of faculty with shared/overlapping research expertise by recruiting faculty who readily integrate into priority research areas.
- Invest in state-of-the-art laboratories and technologies that facilitate faculty competitiveness for extramural funding.
- Maintain and foster current research partnerships (e.g., AZCC, Bio5) while extending collaborations to statewide initiatives.
- Identify qualified prospective faculty and staff members in target disciplines whose background, age, gender, and life experience will contribute diversity to the college’s profile, and assertively recruit them for open positions.
- Encourage faculty participation in professional organizations, and through mentoring identify leadership opportunities within relevant organizations. Support faculty in establishing national and international reputations leading to participation on policy-driving and decision-making national and international review panels.
- Annually nominate faculty for national and international awards and broadly distribute, through national newswires and other means, announcements of awards received by faculty.

Metric: Number of faculty nominated for and receiving national/international awards, holding leadership roles in national/international organizations, serving on national/international review boards/committees, serving as plenary or keynote speaker.
Metric: Faculty turnover.
Metric: Research funding per tenured/tenure track faculty FTE.
Metric: Ratio of COP investment in the research enterprise relative to investments from the VPR/Provost.
Metric: Number of submitted and funded collaborative research initiatives.

**Expand philanthropic success**

This directive is fundamental to the overall success of the college and thereby correlates to all goals. It especially affects our abilities to recruit and support students (Goal 1 in Appendix A), create and translate new knowledge (Goal 3) and achieve a supportive environment (Goal 4).

We will employ the following strategy and measure achievement in this area in the following ways:

Implement an assertive strategy (accepted by University of Arizona Foundation) of personal contacts and relationship building with prospective donors designed to ultimately grow the college endowment from its current $4.4 million level to $50 million within a 10-year timeframe.

- Metric: Annual report of face-to-face visits (minimum 150 per calendar year)
- Metric: Annual report of proposals submitted to donors and proposals accepted for new scholarship funds.
- Metric: Annual report of proposals submitted and proposals accepted for new endowed professorships and chairs.

**Extend community engagement and outreach**

Community engagement is an integral element of many centers headquartered at the College of Pharmacy. Patient care, which is the ultimate outcome of all our work, is the most direct way we serve the people of Arizona.

This directive correlates to elements embedded in the following college goals:
- To develop the healthcare system of the future through interprofessional collaboration on research, education and patient care (Goal 5 in Appendix A).
- To educate outstanding pharmacists and scientists who meet society’s changing healthcare needs and expectations (Goal 1 in Appendix A).
- To promote optimal health for individuals and communities by creating and translating new knowledge (Goal 3 in Appendix A).
To achieve an environment and culture the supports diversity and the aspirations
of the college community (Goal 4 in Appendix A).

We will employ the following tactics and measure achievement in this area in the
following ways.

Maintain (and when resources permit, expand) the following existing programs and
centers that provide direct patient care or health services as well as education:

- Rural Health/Health Disparities Program
- Experiential Education Program
- Pharmacy Residency Programs
- Patient care activities of Pharmacy faculty
- Arizona Poison and Drug Information Center
- Medication Management Center
- Student-organized/faculty supervised health screenings and education events

Metric: Number of calls (annually) received by Arizona Poison and Drug Information
Center and number of patients served and interventions implemented (annually) by
Medication Management Center.
Metric: Number of citizens served (annually) at college-sponsored screenings and
referrals made for follow-up care.
Metric: Number of students participating (annually) and outcomes of Rural Health
Program activities.

Maintain (and when resources permit, expand) the following projects and centers that
provide education and prevention services to Arizona residents, including healthcare
professionals:

- Southwest Environmental Health Sciences Center Community Outreach Core
- US - Mexico Binational Center for Environmental Health and Toxicology
  Community Outreach
- PharmCamp and other collaborations for K-12 (i.e., MedCamp, MedStart, KEYS
  internships)
- Prepharmacy Club
- Continuing Pharmacy Education Programs

Metric: Number of K-12 students and K-12 teachers enrolled in health professions or
environmental health education programs sponsored or co-sponsored by COP units.
Metric: Annual report of community projects implemented by Southwest
Environmental Health Sciences Center and Binational Center, including estimate of
citizens affected by each project.
Metric: Number of pharmacists and scientists participating in continuing education
programs.
Metric: Number of continuing education programs delivered by college faculty.
Metric: Number of new pharmacy residency programs developed with assistance
from the college of pharmacy.
APPENDIX A

College of Pharmacy Vision, Mission, Values, and Goals

Vision of the College of Pharmacy

We will be the preeminent college of pharmacy in the country for pharmacy-related education, research, service and patient care.

Mission of the College of Pharmacy

To provide outstanding professional and graduate education, generate and expand pharmaceutical knowledge, optimize health and improve quality of life in a dynamic and global community.

Values of the College of Pharmacy

As a center of excellence in pharmacy education and research, we are committed to serving our students and supporting our faculty, professionals and staff. We recruit, retain, and support academically talented individuals from diverse backgrounds and will do everything possible within the limits of our resources to promote their success.

The ultimate goal of all our efforts is to improve the health-related quality of life of individuals and communities. Our research and clinical endeavors will help shape healthcare innovation. As a center of discovery, we also serve as an incubator for economic development related to health care entrepreneurship and health product development, and will support policies and structures needed to encourage this development.

We believe it is not only our responsibility to teach and train, but to provide leadership for the profession of pharmacy, pharmacy education and within the scientific disciplines. We will assign resources to develop leadership skills within our faculty, students and staff, and will support their leadership service within the college, university, and professional organizations.

College of Pharmacy Goals

1. Recruit, support, and educate the best students from diverse populations to become outstanding pharmacists and scientists who meet society’s changing healthcare needs and expectations.
2. Enhance the leadership role of the College of Pharmacy in pharmacy organizations, health policy, and pharmaceutical and health research.
3. Promote optimal health for individuals and communities by creating new knowledge about medications and therapies and translating that knowledge to personalized, patient-centered care and disease prevention.
4. Achieve an environment and culture that supports diversity and the collective and individual aspirations of all members of the college community.
5. Develop the healthcare system of the future through interprofessional collaboration on research, education, and patient care.