



Ensuring Individual Success in an Academic Career Report of the 2004-05 Academic Affairs Committee

Nicholas G. Popovich ^{a*}, Patrick J. Davis ^b, L. Clifton Fuhrman ^c, Amy M. Haddad ^d, Mary R. Monk-Tutor ^e, Frank Romanelli ^f, and Susan M. Meyer ^g

^aCollege of Pharmacy, University of Illinois at Chicago, M/C 871, 833 South Wood Street, Chicago IL 60612; ^bCollege of Pharmacy, University of Texas at Austin, 1 University Station A1900, Austin TX 78712-0120; ^cCollege of Pharmacy, University of South Carolina, Columbia SC 29208; ^dSchool of Pharmacy and Health Professions, Creighton University, 2500 California Plaza, Omaha NE 68178-0104; ^eMcWhorter School of Pharmacy, Samford University, 800 Lakeshore Drive, Birmingham AL 35229; ^fCollege of Pharmacy, University of Kentucky, Rose Street-Pharmacy Building, Lexington KY 40536-0082; ^gAmerican Association of Colleges of Pharmacy, 1426 Prince Street, Alexandria, VA 22314-2841

*Chair

BACKGROUND AND CHARGES

According to the Bylaws of the AACCP, the Academic Affairs Committee shall consider:

the intellectual, social, and personal aspects of pharmaceutical education. It is expected to identify practices, procedures, and guidelines that will aid faculties in developing students to their maximum potential. It will also be concerned with curriculum analysis, development, and evaluation beginning with the preprofessional level and extending through professional and graduate education. The Committee shall seek to identify issues and problems affecting the administrative and financial aspects of member institutions. The Academic Affairs Committee shall extend its attention beyond intra-institutional matters of colleges of pharmacy to include interdisciplinary concerns with the communities of higher education and especially with those elements concerned with health education.

In July 1993, the AACCP Board of Directors approved the establishment of the Center for the Advancement of Pharmaceutical Education (CAPE). CAPE became, and continues as, the organizational structure within AACCP that focuses the Association's resources and energies on 1) developing and maintaining contemporary educational outcomes for the professional degree program in pharmacy, 2) facilitating program assessment activities, and 3) enhancing faculty teaching and scholarship skills. Significant CAPE initiatives related to faculty development focused on the creation of Education Scholar®, Web-based teaching excellence and scholarship development resources for health professions educators. Foundational to the development of the Education Scholar® curriculum was the work of Ernest L. Boyer. In his book, *Scholarship Reconsidered: Priorities of the Professoriate*, Boyer detailed four interrelated types of faculty scholarship:

- *discovery*, or disciplinary research;
- *application*, or responsibly applying knowledge to societal needs and practice;

- *integration*, or interdisciplinary collaboration; and
- *teaching*, or the systematic approach to student learning through discovering what and how students learn.¹

In this broadened view of faculty work, the thread that runs through the four types of scholarship is the commitment to standards of excellence that can be evaluated. Each requires a systematic approach of appropriate faculty preparation, accurate observation, documentation, and understanding as an intellectual activity.

Throughout the past two decades, various AACP committees have addressed issues related to faculty preparation for academic careers and skill development to assure success in those careers. Resultant Association policies generated from those discussions include:

The Association encourages colleges to clearly identify the guidelines by which the scholarly, teaching and service activities of clinical faculty will be evaluated. (*Source: Policy Development Committee, 1981*)

AACP supports the development of graduate degree programs for the purpose of educating and training pharmacist/clinical scientists at schools and colleges of pharmacy with adequate pharmaceutical science and clinical faculty and facility resources. The pharmacist/clinical scientist graduate programs should contain appropriate coursework and research requirements to award the appropriate graduate degrees (M.S./Ph.D.) to those individuals who successfully complete the program. (*Source: Research and Graduate Affairs Committee, 1998*)

AACP encourages each college and school of pharmacy to develop among its individual faculty members an understanding that the mission(s) of the college can be achieved only through the collective strengths of individual faculty members, acknowledging that responsibilities and contributions vary widely and may change significantly over the course of an individual's career. (*Source: Academic Affairs Committee, 1992*)

AACP encourages activities by colleges to clearly identify the guidelines by which the scholarship of teaching and service activities of all college faculty will be evaluated. (*Source: Academic Affairs Committee, 1992*)

All pharmacy faculty have a responsibility to generate and disseminate knowledge through scholarship. (*Source: Research and Graduate Affairs Committee, 1993*)

AACP affirms the importance of research to the pharmacy profession and the pharmacy education enterprise. Furthermore, AACP affirms that every full-time faculty member is expected to participate in the generation and/or application of new knowledge and its dissemination to an extent consistent with the mission of the school or college. (*Source: Research and Graduate Affairs Committee, 1995*)

The current shortage of faculty, the expansion of the pharmacy education enterprise in the U.S. in terms of the number of programs and number of students enrolled in those programs, and anticipated faculty and administrator turnover due to impending retirements necessitate a contemporary, critical review of 1) expected faculty roles, 2) current and suggested strategies for promotion of academic careers to young professionals, and 3) the spectrum of faculty development opportunities across the span of an academic career.

In the preparation of faculty and administrators, mentoring relationships and leadership development efforts must be nurtured. Newly appointed faculty must continue to be afforded opportunities to develop and enhance their teaching, practice, and research skills – those that contribute to a culture of learning – and ability to conduct each in a scholarly way.² Development programs and mentoring activities must occur to prepare individuals to assume administrative roles including department heads and chairs and deanships.

Within the context of the current higher education environment and specific needs of contemporary academic pharmacy, President-elect JoLaine R. Draugalis asked the 2004-05 AACP Academic Affairs Committee to explore how AACP and its member institutions might foster interest in and preparation for careers in academic pharmacy and facilitate progressive development of faculty skills across the entirety of an academic career. Specifically, the committee was charged to:

- Propose strategies to promote careers in academic pharmacy and to attract strong candidates to faculty positions;
- Recommend teaching and research skill development programs for pharmacy faculty to facilitate their success in the contemporary pharmacy education environment;
- Provide a review of the role of leaves, sabbaticals, mini-sabbaticals, and other development opportunities to replenish, bolster skills, and/or change direction; and
- Re-examine the usefulness and currency of the AACP Academic Life brochures and, if deemed to be of contemporary value, suggest necessary revisions and dissemination strategies.

RECRUITING TO ACADEMIC CAREERS

Addressing current faculty shortages and preparing the next generations of pharmacy faculty requires enhanced efforts in attracting students toward an academic career. However, there is a need for a sustained, in-depth approach that is more broad and systematic than simply providing doctor of pharmacy students exposure to academia as a possible career path. First, academic pharmacy must recognize that there are at least four student populations where future academicians might be identified, mentored, and nurtured to an academic career path: (1) professional (doctor of pharmacy) students; (2) postgraduate students in the clinical sciences and administrative sciences (i.e., residents, fellows, and those in clinical or administrative graduate programs) who typically have a foundation in pharmacy; (3) graduate students in the pharmaceutical sciences with a pharmacy background; and (4) graduate students in the pharmaceutical sciences with backgrounds outside of pharmacy (e.g., chemistry, biology, chemical engineering). In addition to these four student populations, there is also the possibility of attracting practitioners who desire a career change and who have harbored at one time or another, a yearning for the academic life.

Visualizing the academic pipeline allows the recognition that there are several “valves” that ultimately control the current and potential throughput in terms of developing future faculty. Valve 1 (doctor of pharmacy students entering post-graduate education and training) is positively influenced by identifying those students with an aptitude and interest toward teaching and/or research and guiding them towards postgraduate studies and opportunities. Negative factors affecting this flow include the wealth of rewarding practice opportunities for our graduates, increasing indebtedness as the cost of pharmacy education continues to escalate, and the additional time commitment required beyond earning the doctor of pharmacy degree (and in an increasing number of cases, an earned prior degree). Many, if not most, pharmacy faculty identify the positive influence of one or more mentoring faculty as a prime motivational factor in their career decision. The positive impact of this personal touch in modeling the rewards of an academic career cannot be overstated in terms of successfully addressing the countercurrent factors.

Clearly, just because doctor of pharmacy students can be attracted to postgraduate studies does not guarantee that they will choose an academic career (Valve 2). Again, multitudes of competing career paths following advanced study, coupled with accrued indebtedness, substantially diminish the flow into academia. Thus, it is imperative that exposure to academia as a career path continues during this critical period of student development and that those with potential continue to be nurtured. In addition, academic pharmacy must recognize that an increasing number of graduate students in the pharmaceutical sciences come from disciplines other than pharmacy: providing these students a fundamental understanding of pharmacy (including an orientation to the doctor of pharmacy curriculum and the nature of contemporary practice) is essential if there is an expectation that they can be attracted into an academic career.

The 2004 Final Report of the AACP COD-COF Faculty Recruitment and Retention Committee focused on "...strategies schools individually and the association collectively may wish to pursue in the recruitment and retention of faculty."³ In that timely report, a number of excellent recommendations and strategies were developed that specifically addressed providing students positive exposure to the academic lifestyle with the goal of making academics their career choice. Examples included:

- Provide a structure by which students can be actively engaged in AACP activities, including programming at the national meeting.
- Continue and enhance organizational programming at national meetings (e.g., AACP, ASHP, AAPS) that focus on the academic careers in pharmacy
- Enhance student exposure to academics at the school level through such mechanisms as academic internships, elective professional development seminars.
- Encourage schools to embrace a requirement that all students complete a small-scale research project to provide exposure to this important aspect of academic life and scholarship.
- Develop a national student organization to support students interested in an academic career similar to existing professional organizations that focus on other areas of practice.

A number of such efforts are already underway at the local and national level, including the new AACP Wal-Mart Annual Meeting Scholarships in which students are invited to attend the AACP annual meeting with their faculty mentor. As national and local efforts grow it will be important to share the efforts of the academy and the Association and identify best practices.

Promoting Academic Careers to Professional Degree Students, Graduate Students, Residents, and Fellows

A number of the following strategies may be specific to a particular population of students (e.g., doctor of pharmacy students, graduate students). Many, however, would be germane for multiple student audiences. Therefore, the term "student" will be used here in the broadest sense (e.g., doctor of pharmacy students, graduate students, residents, and fellows).

Tutoring and academic assistants. One of the earliest indicators that a student is interested in teaching is in volunteering to serve as a tutor for other students having academic difficulty. Tutors are, by definition, students who have excelled in one or more particular subject areas, and successful tutoring suggests that they have aptitude and interest in positively impacting the learning of fellow students. Along the way, however, tutors may occasionally experience the frustrations associated with teaching and it is important that a structure be in place to help them grow through those experiences rather than be discouraged by them. Ideally, tutors should be provided basic training in pedagogy to heighten their awareness of different learning styles and to ensure that they are equipped with basic approaches to address those differences. Formal written guidelines should be in place that address issues such as recording hours and locations where tutoring can take place, how to deal with absenteeism, and other issues. Rarely will new guidelines and policies have to be developed: most universities have educational centers in support of

faculty teaching that can provide such guidelines that can be tailored to the specific needs of the program (see, for example, <http://www.utexas.edu/student/utlc/>). In addition, every tutor should be provided a faculty mentor with whom to share his or her experiences and to provide guidance when these inevitable difficulties arise.

Some colleges and schools have taken tutoring to a higher level by appointing academic assistants as a formal part of their educational programming. Academic assistants may be salaried positions or course credit be granted for the effort. Like the tutor, these students have demonstrated mastery in one or more subject areas, but are given increased responsibilities either in the number of students with whom they interact or the types of instruction they provide. For example, an academic assistant may be responsible in the early part of a basic science course for conducting help sessions to remediate background deficiencies for those students in need. Students may choose to attend these sessions or may be assigned to attend based on an early assessment of relevant background knowledge. Later in the course, the academic assistant may be responsible for conducting weekly help sessions for those students having difficulty with the course material as it unfolds. In some cases, the academic assistant may be of such a caliber that he or she can serve the functions equivalent to a graduate teaching assistant, and may be assigned formal laboratory sections reflective of those responsibilities. Again, it is important that the academic assistant be adequately prepared and made clear on his or her responsibilities, and that a faculty mentor (i.e., typically, the course coordinator) work closely with student to make sure that the assistantship is a meaningful educational experience.

RECOMMENDATION 1: AACP should establish a network of “academic liaisons” at each member institution, similar to the current network of “research liaisons,” to enhance communication among institutions and provide a conduit by which information about best academic practices may be shared.

Academic internships. The academic internship is perhaps one of the best opportunities for academic pharmacy to identify and nurture students toward a potential academic career. The academic internship is often situated late in the curriculum, so the student has a capstone view of the entire professional program, is prepared to investigate certain aspects of the educational process in more depth, is typically at the point of making crucial career decisions, and has expressed potential interest in academia by virtue of having selected the rotation. The experience provides the opportunity for the student to work closely with a faculty mentor in exploring the wide array of activities and responsibilities associated with being a faculty member.

The details involved in the academic internship vary widely and there is substantial experimentation ongoing in the academy as to structure and content that needs to be harvested to identify best practices. Examples of activities include:

- Exploring learning theory (e.g., Bloom’s Taxonomy);
- Concept mapping;
- Development of course/lecture objectives;
- Design of examination questions;
- Objective *versus* subjective assessment of student performance;
- Statistical analysis of objective examinations;
- Providing and receiving student feedback;
- Peer and student evaluations of teaching;
- Program assessment;
- Attending relevant committee meetings (e.g., curriculum, information technology, image and relations);
- Experiencing the variety of daily activities that occur within an academic position;
- Involvement in research activities;

- Involvement in service to the college or school, the university, the profession, and the community;
- Involvement with faculty teaching duties, e.g., examination grading, assignment grading, course syllabus development; and
- Presenting a lecture or continuing professional education program; serving as a discussion leader during recitation sessions.

Projects can be used to demonstrate the interrelationship of the educational components, such as applying concept mapping to a specific topic in the curriculum (e.g., hypertension, diabetes, drug product formulation, drug metabolism), developing course or lecture objectives for the selected content area based on Bloom's Taxonomy or some other organizing structure, developing examination questions that assess student mastery according to those objectives, statistical analysis of examinations question results, among others. Often the academic internship involves several faculty members, in addition to the preceptor, to provide a full array of experiences for the intern, as well as different faculty perspectives. While one may be able to provide experience in preparing and delivering lectures, teaming up with another faculty member may be necessary to provide structured exposure to small group, case-based laboratory teaching or recitation discussion. A reflective journal in which the student chronicles his or her experiences provides a focus for discussion during regularly scheduled meetings with the preceptor and will also facilitate the development of a final report summarizing the experience (including the impact of the internship on the decision to pursue an academic career). A large number of colleges and schools now include academic internships as elective rotations for students, and it will be important to share best practices and to assess the impact these focused internships have on students entering academia.

Teaching conversations. A number of colleges and schools of pharmacy have initiated an informal seminar series modeled after the University of Illinois College of Pharmacy's "Conversations about Teaching" to provide faculty the opportunity to discuss and reflect on teaching topics of mutual interest in a relaxed, supportive environment.⁴ Such efforts help to address Standard 24, Faculty and Staff, Qualitative Factors, in the Accreditation Council for Pharmacy Education Accreditation *Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree*, requiring each college or school to have an organized professional development program for its faculty that enhances teaching and assessment skills.⁵ Typically, topics for discussion are identified by the participating faculty at the beginning of the semester, and may include such areas as teaching strategies and best practices, assessment, dealing with difficult students, balancing research demands with teaching, among others. Weekly meetings provide continuity, and an opportunity for interaction and free exchange of ideas and experiences. The format allows brief discussion of some topics or more extended conversations over several sessions for more comprehensive, complex topics. Some programs conduct these sessions across multiple campuses involved in the professional program to enhance the sense of community and shared mission among faculty that are separated geographically. Sustaining such a "teaching conversations" program is clearly based on participating faculty feeling that such a program provides a supportive forum for candid, open discussion, and an opportunity for personal and professional growth.

While a "teaching conversations" series typically focuses on faculty development, it also represents an excellent venue for students exploring an academic career to hear firsthand the types of issues with which faculty contend on a daily basis. Thus, it is perfectly appropriate that academic interns, residents, fellows, and graduate students be invited to participate in the conversation. Students gain insights from the issues involved and hear firsthand the range of faculty perspectives in addressing those issues. Certainly, faculty need to be in agreement that student presence would be appropriate. Periodically, then, one meeting may be exclusively attended by faculty. Suffice it to say, however, that student attendance at the meetings is rarely a problem. Indeed, usually, participating faculty are those committed to the teaching mission of the institution, and are fully supportive of sharing this educational experience with these potential future

academicians. In addition, the students provide an important perspective because they have a broad experience across the entirety of the professional program.

Graduate student pedagogy training. An important component allowing for the fulfillment of the educational mission of many colleges of pharmacy is the use of graduate students in the pharmaceutical, social and administrative, and clinical sciences as teaching assistants (TAs) for required courses. For some, this represents a first exposure to teaching and, therefore, is an excellent opportunity to explore academics as a possible career path and to expand the student's abilities as an educator in very structured ways. In many programs, appointments to teaching assistantships are directly coupled to coursework or seminars that focus on pedagogy to provide this structure and to enhance the experience for the TA and the quality of instruction provided their students. All too often, however, TAs are simply thrust into their teaching assignments with little preparation (other than the content to be covered), and, thus, are ill-equipped to address challenging teachings issues that will inevitably arise. The inability to handle such occurrences can have a profound negative effect on one's consideration of academics as a desirable or even viable career path. Thus, it is important that a structured program be in place to support the teaching assistant during this formative period of academic development. While many colleges choose to develop their own in-house programs for supporting the training of graduate students in pedagogy, a resource not to be overlooked is that many universities have larger, fully staffed programs in place that can be tapped into and customized to meet the needs specific to scientific and health professions disciplines.^{6,7} In addition to program structure, it is important that each TA have an identified mentor to help guide him or her in his or her development as educators and to provide support as challenges arise. This mentor is not necessarily the faculty member in charge of the course, nor is it necessarily the student's research supervisor, but he/she should be a faculty member dedicated to and interested in the development of graduate students as educators.

One of the major trends in the pharmaceutical sciences is the increasing number of graduate students that have degrees outside of pharmacy (e.g., biology, chemistry, biomedical engineering). Assignment of these students as TAs brings additional challenges in that they may not have an understanding of the background that doctor of pharmacy students have prior to entering the professional program. Thus, they may not be able to make connections with what they are teaching in the larger context of the professional curriculum. Further, these students may proceed to the completion of their advanced degrees with little or no appreciation of the contemporary practice of pharmacy as a profession. This is most unfortunate in that, although not pharmacy-trained, these advanced degree seekers could represent an outstanding pool of future faculty in the pharmaceutical sciences if (1) their teaching experiences as graduate students were positive and academic-career directed, and (2) they were provided an opportunity to learn about the profession of pharmacy and how their discipline integrally fits within the education of future practitioners and the profession. A structured program to do the latter would also be beneficial to new faculty educated outside of pharmacy to give them a deeper understanding of the professional educational program of which they are now an integral part. It is not clear how widespread this type of professional development is within the academy, but best practices should be identified and applied broadly to enhance this pool of potential faculty in the basic sciences.

Formal residency/fellowship training/certificates. The 2004 Final Report of the AACP COD-COF Faculty Recruitment and Retention Committee recommended that AACP undertake a study of residencies and fellowships to determine the feasibility of adding teaching as a component, at least in college-sponsored or affiliated residencies.³ Models do exist. However, a dilemma is that several that have been in existence for years are still not reported in the literature. Recently, however, several innovative models have been described. Romanelli, *et al.*, described a pilot certificate program for pharmacy residents at the University of Kentucky that was developed to introduce participants to the academic literature, contemporary pharmacy and health professions education, and various teaching styles.⁸ Structurally, the experience included seminars, teaching responsibilities, and the development of a teaching portfolio. Ten

of 14 residents successfully completed the pilot program in the one-year residency period. More recently, these authors provided a comprehensive overview of the structure and success of this “Scholarship of Teaching and Learning Certificate Program (STLC),” including expanding participation thorough distance education linkages to other institutions.⁹ Details of this STLC program can be found at www.mc.uky.edu/pharmacy/residency/teaching.html. Additional teaching certificate programs are emerging such as that described in the literature for the University of Arizona College of Pharmacy.¹⁰ High completion rates were reported for participating residents and detailed self-assessment of confidence in teaching pre- and post-completion of the program showed significant positive growth for the participants. It is important that additional models of programs to prepare residents and fellows for the academic environment be shared so that best practices can be identified amongst the pharmacy academy.

RECOMMENDATION 2: The proposed joint Council of Deans-Council of Faculties committee on faculty workforce should prepare a compilation of model academic internships and establish a process to evaluate longitudinally the success of such internships as measured by the percentages of participating students continuing their education at the postgraduate level and, eventually, securing faculty positions in pharmacy colleges and schools.

RECOMMENDATION 3: The proposed joint Council of Deans-Council of Faculties committee on faculty workforce should 1) prepare a compilation of model programs and initiatives, such as orientation programs, certificate programs, course sequences, structured teaching opportunities, intended to prepare graduate students, residents, and fellows for academic teaching roles; 2) develop guidelines for the development, implementation, and enhancement of such programs, and 3) establish a process to evaluate the success of such efforts as measured by the percentages of participating students securing faculty positions in pharmacy colleges and schools.

RECOMMENDATION 4: A future Research and Graduate Affairs Committee or some other task group should be charged to 1) review the status, use, and evaluation of teaching assistants, distinguishing between those with pharmacy backgrounds and those without pharmacy backgrounds; 2) prepare a compilation of strategies at member institutions to educate graduate students lacking a professional background and/or degree in pharmacy about the profession and the role their scientific disciplines play within the profession; and 3) develop a model education and skill development program for teaching assistants to insure individual growth and ensure maximal impact on the educational offerings in which he or she participates.

SUGGESTION 1: It is strongly suggested that all graduate programs provide basic pedagogical education and skill development, including the support of a teaching mentor.

Promoting Academic Careers to Mid-Career Pharmacists

Most academicians have encountered individuals in practice who yearn to be a part of the educational process and/or pursue a new career direction. Indeed, there are individuals within academic pharmacy now who have followed this path and pursued an academic career after a career in some other aspect of the profession. Oftentimes, however, this yearning to return and change one’s career path is shaken and/or blunted by the realities of having to give up one’s current lifestyle and family responsibilities and obligations, in part, to pursue a new career path. However, it is incumbent upon faculty members to listen to and be sensitive to the needs of these individuals and to reach out to them and nurture their consideration of an academic career.

These individuals bring with them a richness of profession experience that could add immeasurably to an academic program and its vitality. In retrospect, they can reflect back to their professional education and envision ways to enhance the educational process through their experiences and creativity. Thus, it is

important, at the very least, to afford to these individuals the opportunity to participate in some way in the educational process such that, at this crucial moment of decision making, they have a positive experience and contribution upon which to reflect. Whether it be as a preceptor, an instructor in a laboratory, or a guest lecturer, it is important to involve them with the hope that it may lead to increased engagement and consideration to embark upon an academic career. It is important also to discern pathways to facilitate this ultimate transition. Thus, creative mechanisms must be developed to facilitate, for example, acquisition of graduate course work on a part-time basis and, perhaps, research-focused projects in one's current environment or practice arena.

This yearning and desire cannot be achieved without sacrifice and dedication to the task at hand. Thus, it is important to learn from those currently in academic pharmacy who have followed this career path and entered academia as a second career. It would seem that their experience and suggestions could be used to identify and create new pathways, opportunities, and thinking that facilitate even better one's ultimate transition into a new career.

RECOMMENDATION 5: The proposed joint Council of Deans-Council of Faculties committee on faculty workforce should consider surveying Association members who have pursued academic life after being in the profession in another capacity to learn how to best encourage more individuals currently in the practice of pharmacy, pharmaceutical industry, or other capacity to consider a change to an academic career.

PREPARING NEW FACULTY FOR SUCCESS IN ACADEMIC ROLES

The aging of existing faculty, expansion and growth in the number of colleges and schools of pharmacy, and increased class sizes have all contributed to the accelerating rate at which colleges and schools of pharmacy are recruiting and appointing new faculty. In this era of unprecedented expansion and increased need for faculty members, it is possible that institutions will hire novice instructors who are not optimally prepared for faculty roles in teaching research and service and may require greater levels of training and orientation to academia than did their predecessors.¹¹ To help new and young faculty succeed in the contemporary pharmacy environment, several teaching and research skill development program models have been reported in the literature.^{8,10,12,13} However, as Mackinnon points out, these programs must recognize that potential pharmacy faculty candidates may come from diverse academic backgrounds including pharmacy school, pharmacy residency and fellowship training programs, and pharmaceutical graduate programs.¹³ Table I lists select strategies or programs that might be implemented by individual colleges and schools. Information is stratified by target groups (i.e., students, residents, fellows, new faculty) for each skill development area (i.e., teaching and research).

RECOMMENDATION 6: A future Academic Affairs Committee or some other task group should be charged to prepare a compilation of strategies at member institutions to educate new faculty members lacking a professional background and/or degree in pharmacy about the profession and the role their scientific disciplines play within the profession.

RECOMMENDATION 7: A future Academic Affairs Committee or some other task group should be charged to review the status of peer teaching evaluation mechanisms and other faculty teaching skill development and assessment programs at member institutions and develop guidelines for their continual improvement and enhancement.

SUGGESTION 2: AACP member institutions should increase the number of Advanced Pharmacy Practice Experiences that emphasize academic and research skill development.

SUGGESTION 3: AACP member institutions should develop formalized orientation programs for new faculty that include and emphasize aspects of academic appointments that pertain to the multitude of academic success measures (e.g., in teaching, research, university and community service, patient care service).

SUGGESTION 4: AACP member institutions should develop, implement, and evaluate mentoring programs for all faculty, with special attention to junior faculty.

SUGGESTION 5: AACP member institutions should encourage, and if possible, provide financial support for all junior faculty members to attend a minimum of one American Association of Colleges of Pharmacy annual meeting.

SUGGESTION 6: AACP member institutions should develop professional and career development course work encompassing career planning for its professional doctoral students.

SUGGESTION 7: AACP member institutions should contact and nurture alumni to attract those who might be interested in returning to graduate school in anticipation of embarking on a second career in academic pharmacy.

SABBATICALS AND OTHER RENEWAL OPPORTUNITIES

The faculty sabbatical (the term is drawn from the Biblical idea of a period of rejuvenation and rest) is an integral part of research and development over the life-span of an academic career. In this view, sabbatical leaves are not a “gift” from the academic institution, but a normative part of a faculty member’s work. Boyer notes that faculty, regardless of the stage of their professional career can benefit from periodic opportunities of renewal such as a sabbatical.¹ In the AACP COD-COF Faculty Recruitment and Retention Committee Final Report in 2004, sabbaticals are mentioned four times as a means to attract individuals to an academic career citing leaves as a benefit and a source of indirect compensation.³ So, sabbaticals and other renewal opportunities such as the AACP scholar-in-residence programs and other fellowships within and outside of pharmacy education are important for recruitment, development, and retention.

Sabbaticals can take many forms. Because sabbaticals require some form of disengagement from the everyday obligations of full-time faculty members, a traditional sabbatical usually required a year-long residence at another institution. Most higher education institutions allow faculty members to choose a one-year leave at half salary or a six-month leave at full salary after a designated period of service to the university (usually six years). However, emerging trends indicate that faculty may benefit from mini-sabbaticals earlier in their careers such as a three month leave at the end of the third year of service to consider goal achievement and prepare for tenure and promotion.¹⁴ Some additional options include residence at a clinical site to update and refine clinical skills, serving as a consultant to non-academic organizations such as third party payers or industry, or expanding skills in education, but not specifically, in pharmacy education. Sabbaticals and other types of leaves can be used to respond to new lines of research, shifting one’s research agenda, studying new research techniques, writing grant proposals, and publishing findings.

Faculty members generally shoulder the burden of demonstrating that their sabbatical leave will bring benefits to the college or school, the profession and/or the population, in general. Preparation for a sabbatical leave requires considerable advance planning, in addition to determining the personal and professional benefits that will result from the leave.¹⁵ Faculty members and their deans must consider the impact that the leave will have on other faculty members and program obligations during their absence.

Finally, a post sabbatical reporting mechanism should be in place to assist in gauging the benefit of such leaves on a personal, professional and institutional basis.

RECOMMENDATION 8: The AACP Council of Faculties should update the “Academic Life” series of brochures developed in the late 1980s and early 1990s to include a series of Web pages with ones dedicated to sabbaticals and leaves with emphasis on planning for a sabbatical with a checklist of questions for consideration and links to funding opportunities.

RECOMMENDATION 9: A future Academic Affairs Committee or some other task group should be charged to conduct an exploratory, descriptive study to define the various purposes, benefits, and outcomes of sabbaticals for pharmacy educators.

REFERENCES

1. Boyer EL. *Scholarship Reconsidered: Priorities of the Professoriate*. The Carnegie Foundation for the Advancement of Teaching. Princeton, NJ, 1990.
2. Bowden J, Marton, F. *The University of Learning: Beyond Quality and Competence in Higher Education*. London and Sterling, VA: Kogan Page Limited; 1998.
3. AACP COD-COF Faculty Recruitment and Retention Committee Final Report, June 9, 2004. Unpublished. Available at http://www.aacp.org/Docs/AACPFunctions/Governance/6177_AACPCommitteeonRetentionFinalReport.pdf. Accessed June 10, 2005.
4. Successful Practices in Preparation for and Success in Academic Careers in Pharmacy. Available at http://www.aacp.org/Docs/MainNavigation/Resources/6719_05SuccessfulPractices-PreparationforAcademicCareers.pdf. Accessed June 10, 2005.
5. Accreditation Standards and Guidelines, Accreditation Council for Pharmacy Education. Available at <http://www.acpe-accredit.org/standards/standards1.asp>. Accessed June 10, 2005.
6. ASPECTS: Advancing Students’ Professional Excellence with Certificates in Teaching Series. The University of Texas at Austin, Division of Instructional Innovation and Assessment. Available at <http://www.utexas.edu/academic/diia/gsi/aspects/>. Accessed June 10, 2005.
7. Center for Instructional Excellence. Purdue University. Available at <http://www.cie.purdue.edu/>. Accessed June 10, 2005.
8. Romanelli F, Smith KM, Brandt BF. Development and implementation of a scholarship of teaching and learning certificate program for pharmacy residents. *Am J Health-Syst Pharm* 2001; 58:896-8.
9. Romanelli F, Smith KM, Brandt BF. Teaching Residents How to Teach: A Scholarship of Teaching and Learning Certificate Program (STLC) for Pharmacy Residents. *Am J Pharm Educ*. 2005; 69(2): article 20.
10. Castellani V, Haber SL, Ellis SC. Evaluation of a teaching certificate program for pharmacy residents. *Am J Health-Syst Pharm* 2003; 60:1037-1041.

11. Lee M, Bennett M, Chase P, Gourley D, Letendre D, Murphy J, Nappi J, Nelson A, Taylor C, Speedie M, Carter R. Final Report and Recommendations of the 2002 AACP Task Force on the Role of Colleges and Schools in Residency Training. *Am J Pharm Educ.* 2004; 68(1)S2.
12. Glover ML, Armayor GM. Expectations and Orientation Activities of First-Year Pharmacy Practice Faculty. *Am J Pharm Educ.* 2004; 68(4): article 87
13. MacKinnon GE. Administrator and Dean Perceptions Toward Faculty Development In Academic Pharmacy. *Am J Pharm Educ.* 2003; 67(3): article 97.
14. McGuire, L.K., Bergen, M.R., Polan, M.L. (2004). Career advancement for women faculty in a U.S. school of medicine: perceived needs. *Academic Medicine* 79(4):319-325.
15. Hubbard, M. (2002). Exploring the sabbatical or other leave as a means of energizing a career. *Library Trends*, 50(4):603-613.

Table I. Strategies for teaching and research skill development.

Target Audience	Teaching Development	Research Development
Students	<ul style="list-style-type: none"> • Inclusion of student development initiatives toward performance-based skills, e.g., oral presentations and emphasis on presentations skills, within professional degree programs. • Academic instruction-focused advanced pharmacy practice experiences. • Teaching assistantships for professional degree students in core laboratory and recitation courses. • Continuum of professional development courses that focus on career planning. • Inclusion of students in the educational process of the college or school, e.g., membership on the curriculum committee. 	<ul style="list-style-type: none"> • Inclusion of a research project component within the professional pharmacy curricula. • Instruction regarding research methods within the professional pharmacy curriculum. • Research-focused advanced pharmacy practice experiences. • Joint-degree programs, e.g., Pharm.D./Ph.D.
Residents/Fellows	<ul style="list-style-type: none"> • Scholarship of Teaching and Learning Certificate Programs. • Formal recognition of residents with outstanding teaching abilities and contributions with award programs. • Teaching assistantships and other opportunities to present lectures and lead discussion groups within the professional curriculum. 	<ul style="list-style-type: none"> • Formalized inclusion of research requirements and institution specific research logistics (e.g., IRB) • Completion of a formalized research project that includes data collection, analysis, presentation, and publication. • Inclusion of a research seminar series within residency training programs. • Recognition of residents with outstanding research abilities and contributions with award programs.
Graduate Students	<ul style="list-style-type: none"> • Scholarship of Teaching and Learning Certificate Programs. • Continuum of courses in pedagogy for graduate students serving as teaching assistants. • Mentoring relationships with faculty members in the area of teaching skill development. • Inclusion of a teaching component within post-graduate education and training programs. 	<ul style="list-style-type: none"> • Formalized inclusion of research requirements and institution specific research logistics (e.g., IRB) • Joint degree programs in graduate studies. • Mentoring relationships with faculty members regarding opportunities for research within academia.
New Faculty	<ul style="list-style-type: none"> • Scholarship of Teaching and 	<ul style="list-style-type: none"> • Formalized inclusion of

	<p>Learning Certificate Programs.</p> <ul style="list-style-type: none"> • Formalized introduction to teaching and teaching resources within new faculty orientation programs. • Completion of Education Scholar® program. • Opportunities to education and train teaching assistants in pedagogy. • College/school-supported attendance at a minimum of one American Association of Colleges of Pharmacy annual meeting. • Attendance at an annual national conference to develop teaching skills and increase content knowledge. • Mentorship programs and relationships with senior faculty. • Peer teaching evaluation programs. • Unique faculty appointment options including: tenure, non-tenure, contractual. 	<p>research requirements and institution specific research logistics within new faculty orientation programs.</p> <ul style="list-style-type: none"> • Mentorship programs and relationships with senior faculty. • Research seminar series or focus group for new faculty. • Unique faculty appointment options including: tenure, non-tenure, contractual.
Mid-Career Faculty	<ul style="list-style-type: none"> • Opportunities to participate in the educational mission of the academic institution (e.g., curriculum committee, teaching assistantships, guest lectures). • Availability of adjunct faculty/instructor lines that allow for preceptorships within early and advanced pharmacy practice experiences. • Mentorship programs and relationships with senior faculty. • Unique faculty appointment options including: tenure, non-tenure, contractual. • Continuing professional development opportunities that allow participants to review and/or refine teaching skills or stimulate interest in this area. • Attendance at national teaching conferences (e.g., AACP, APhA OTC Institute) to develop teaching skills and increase content knowledge. 	<ul style="list-style-type: none"> • Programs that facilitate joint scholarship with existing faculty members either as co-investigators or within advisory roles in new or on-going research projects. • Availability of flexible/part-time curricular offerings (e.g., basic research methods, research ethics, statistical analysis) and re-engineering programs. • Continuing professional development opportunities that allow participants to review and/or refine research skills or stimulate interest in this area.

