

Establishing Equilibrium in the Pretenure Years: A Chemist's Perspective in a School of Pharmacy

John M. Rimoldi

The invitation to participate in this special issue regarding new faculty in pharmacy couldn't have come at a more auspicious time, since I recently concentrated the initial five years of my academic career (all the essence and substance fitting in a three-ring binder) in the submission of my tenure and promotion dossier. My intentions in writing this manuscript are not rooted in pontificating about the tenure process, but as I begin to consider its impact and effects on my academic freedom, expectations, and attitudes in these tenure-track years, I have come to the realization that *it is this single process that disenchants the majority of new faculty*. My opinion is shared by a commentary concerning a recent survey of faculty opinion, conducted in the fall of 1996, that revealed a striking 38% of respondents were disappointed with the current tenure system—that figure approaching 43% among female faculty (1). It has been stated that “gaining tenure—or the fear of not gaining it—is a significant intrinsic motivator for faculty” (2). Since tenure lies at the

John M. Rimoldi, Ph.D., is Assistant Professor of Medicinal Chemistry and Research Associate Professor in the Research Institute of Pharmaceutical Sciences, School of Pharmacy, University of Mississippi, University, MS 38677 (E-mail: jrimoldi@olemiss.edu).

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crux of differentiating most junior faculty from the rest of the academy, I am of the opinion that the pretenure process shapes our decision-making processes as we strive to establish tripartite excellence as academicians and will eventually affect the way we “do business” in the inaugural years. In this tone, I will attempt to share some lessons learned from the perspective of one who entered the pharmacy academic community devoid of any formal pharmacy training or expertise.

The University of Mississippi is a public institution with campuses in Oxford (main), Jackson, Tupelo, and Southaven, Mississippi. It houses the state’s only pharmacy school and medical school, and has a total student enrollment of 12,500. The School of Pharmacy’s administrative structure is rather complex, with six academic departments (Pharmacy Practice, Medicinal Chemistry, Pharmaceutics, Pharmacology, Pharmacognosy, Pharmacy Administration), the Research Institute of Pharmaceutical Sciences (research activities conducted through the National Center for Natural Products Research and Environmental and Community Health Research), and a Center for Pharmaceutical Marketing and Management, all under the school’s administrative umbrella. Most academic full-time faculty members are granted joint appointments in the Research Institute. The School of Pharmacy is located on the Oxford campus with the exception of the Department of Pharmacy Practice, which is mainly located on the Jackson Campus (two hours south of Oxford). Communication between the two campuses has improved over the last few years due to enhancement of technology but remains less than desirable due to distance factors.

One of the strengths of the School of Pharmacy is the academic departmental structure, which allows for new faculty and graduate students to maintain an “identity” within their discipline. This is in direct contrast to institutions that have consolidated diverse departments into a single pharmaceutical sciences division. I represent 1 of 6 faculty in the Department of Medicinal Chemistry, with a graduate student enrollment of approximately 15-20 students, similar in size to the other 4 basic science departments in the school. Undergraduate students are admitted formally into the School of Pharmacy under the B.S. in Pharmaceutical Sciences degree program. Students in this program may choose one of six tracks to follow, each preparatory for a different career path. For example, undergraduate students in their P3 year may elect to continue in the Medicinal Chemistry Track in the P4 year, which would comprise courses in advanced medicinal chemistry and associated laboratory experience. Students completing the track in medicinal chemistry have opportunities to seek employment in the phar-

maceutical industry as B.S. degree scientists or to seek an advanced degree in a graduate program. The majority of students elect to continue in the general pharmacy track en route to the professional Pharm.D. degree. The School of Pharmacy has recently (1996) instituted the Pharm.D. degree as the sole practice degree and also offers a post-baccalaureate Doctor of Pharmacy for practicing pharmacists who wish to supplement their professional education and further develop their clinical skills. Advanced degrees (M.S., Ph.D.) are offered in each of the basic science departments; graduates of the Department of Medicinal Chemistry traditionally seek employment in the pharmaceutical industry, academic or industrial postdoctoral appointments, or academic appointments.

Having a background in the chemical sciences with a Ph.D. degree in organic chemistry and related postdoctoral experience in bioorganic chemistry, my expectations formed through these training experiences were first reckoned in light of the realities of the academic role and workload. Most new faculty members leave graduate school or a postdoctoral appointment ill-prepared to assume new and immediate responsibilities of teaching, research, and service. After arriving on campus, one must adjust to an academic climate with different cultures, missions, and expectations from the one left behind. This period of readjustment has been commonly referred to as the encounter phase and may last up to three years (3). A key task at this phase is role definition, which involves clarifying responsibilities, establishing priorities, and allocating time productively (4). Diminishing the time spent in the encounter phase is fundamental to increasing scholarly productivity in the pretenure period. This may be accomplished largely with a formal faculty mentoring program. Although I was informally mentored into academics by my postdoctoral advisor, I was first introduced to the concept of faculty mentoring through the American Association of Colleges of Pharmacy (AACP)-driven Mentoring Program, launched by the Section of Teachers of Medicinal Chemistry in 1996. This inaugural initiative matched senior faculty (one external mentor, one internal mentor) with nontenured faculty (protégé) to facilitate the protégé's success in teaching and research responsibilities. Although the dynamics of faculty mentoring have long been considered a "natural" phenomenon that occurs without a procedural requisite, having a structured program is fundamental for a variety of reasons. New faculty members are particularly susceptible to the negative pressures of new academic assignments, lack of social support networks, and exposure to department/school/university discord and weaknesses not immediately apparent during the

interview. Active mentorship is especially important in these circumstances because, traditionally, new faculty members are passive in seeking help that may be misinterpreted as a sign of weakness. I profit from having mentors with excellent listening skills, positive collegial attitudes, and a firm commitment to my professional development. A formal mentoring program also increases protégé accountability to the mentor and, ultimately, to the university. Long-term career planning is facilitated, stress levels are reduced, and collegiality between senior and junior faculty is enhanced. This process should mirror the mentoring process that occurs habitually between a graduate student and a faculty advisor. I will comment on several tangible benefits reaped from this mentoring process in later sections.

For the mentoring process to operate efficiently, collegiality among faculty members at all levels must be fostered. The collegial atmosphere intra- and interdepartmentally at the university has been outstanding; this climate was prominent during the interview process and has not changed substantially over the last five years. Collegiality cannot be taken lightly and must be continually cultivated in a profession that is inherently multifaceted and highly autonomous. The “met expectations” hypothesis predicts “that when an individual’s [job] expectations—whatever they are—are not substantially met, his propensity to withdrawal should increase” (5). Most of my research and teaching collaborations have occurred by virtue of the collegial environment in the school and, ultimately, have led to greater job satisfaction and increased productivity. A collegial climate is also fundamental to provide students (graduate and undergraduate) with examples of solid professional relationships and attitudes at the professorial level.

It is difficult, but not impossible, to strike a proper balance between the demands of maintaining a rigorous research agenda and the recent calls for a renewed dedication to teaching (6). A common grievance for most new faculty is that there is only a limited amount of time that one can devote to research activities given other faculty time allocations, particularly in a public research-oriented institution. Faculty time expenditures have great influence on faculty research output, which affects retention, promotion, compensation, and peer recognition, especially considering the current reward structure, in which “published research is the common currency of academic achievement” (7, 8). However, increased time allocation to research activities is not necessarily correlated with increased research productivity. For example, my first semester in academe was dedicated principally to writing grant applications, setting up my laboratory, and becoming accustomed to the new university

structure. I fervently scrambled the first year, targeting extramural agencies with funding interests similar to my research interests, even if the similarities were scant at best. I spent more time trying to secure funding than maturing my research projects and interests. After having some immediate success at securing external funding within the first year, I was faced with the responsibility of managing those grants and fulfilling the specific aims outlined in the projects. I then had grant dollars secured to purchase commodities and equipment and to support a graduate student, but I did not have any full-time graduate students under my direct supervision until year three of my academic appointment. Coupled with a start-up package that was not sufficient to hire a post-doctoral research associate or technician, these initial grants did not produce the outcomes I had envisioned. Research *timing* was more critical than the *time* available in this instance. Although I consider these events part of the professional development experience, they can be injurious during the pretenure years. Rebounding from such experiences is difficult but was enabled by continual mentoring and advice by seasoned faculty. The same timing issues will undoubtedly surface in the domain of teaching.

I was initially introduced to the departmental teaching activities at a gradual, but deliberate, pace over the last five years. This is an exemplary method of faculty professional development for new assistant professors, insofar as it enabled me to devote dedicated time to research activities at the onset, and it progressively introduced me to the methods of instruction in a school of pharmacy. Gradual increases in teaching responsibilities allowed me to spend time observing my colleagues in the classroom and provided me with opportunities to develop my own course material. Having a background in organic chemistry, it was not an easy task to enter a professional curriculum and be responsible for teaching and training future pharmacists. I expended a great deal of time learning the “language” of a pharmacist and learning how to teach this new language. I also had to divorce myself from trying to force-feed organic chemistry at the undergraduate level (known to produce “chemophobia”) and to focus on teaching pharmacists the influence that medicinal chemistry has on pharmacy (9). I also reserved time for developing new graduate-level courses in our curriculum.

Instruction at the graduate level in medicinal chemistry has been extremely enjoyable, particularly since it has kept me current with advances in the field and allowed for the refinement of my teaching methods at a more advanced level. Moreover, our department operates on the tenet that each faculty member is given an opportunity to select

courses to instruct based on subdiscipline expertise and semester load. Teaching loads and obligations in a school of pharmacy are minimal in comparison to most nonprofessional degree programs like chemistry. The university has created an extensive support environment for teaching by providing faculty with state-of-the-art instructional technologies, teaching workshops, and faculty-to-faculty forums on pedagogical issues. The School of Pharmacy also has been instrumental in providing new faculty with resources and funds to enhance instructional frameworks in each academic department. For example, the School of Pharmacy has provided travel funds for faculty to attend AACP meetings, equipped classrooms with state-of-the-art technology, and instituted a School of Pharmacy Faculty Instructional Innovations Award.

Although the academic support structure is in place, it is not clear if the university's administration weighs excellence in teaching as heavily as excellence in research in the tenure and promotion process. Wolverton argues, "Rewards for research and publications, and punishments for failure to accomplish these, are well defined and substantial; but rewards (the granting of tenure or promotion, for example) for good teaching remain limited" (2). Intrinsic rewards abound (teaching satisfaction, positive student/peer feedback, self-evaluation and assessments), but external rewards are few. Although philosophies such as these may sound the gloom and doom alarm, there are methods one can employ to try to establish equity between teaching and research during the tenure and promotion process. One path I chose to take involved the creation of a teaching portfolio, which established an opportunity for my colleagues and the administration to review my teaching in a more objective and substantial manner.

My external mentor was the first to suggest that I consider creating a teaching portfolio; he provided me with a portfolio template in addition to advice concerning its content. Although discussions concerning the importance of creating teaching portfolios have occurred at both the school and university level at the University of Mississippi, efforts to adopt this practice globally have not been pursued aggressively. Nonetheless, I constructed my teaching portfolio using a combination of two templates (10, 11). My portfolio included evidence of teaching excellence, containing particulars such as new course development, course revisions, innovative methods of instruction, semester course loads and size, graduate and undergraduate advising (in the form of research or academic advising), graduate student theses/dissertation committee service, and other factors that contribute overall to professional development. Another component included assessment and evaluation (students,

peer, and self), which is critical and takes time to construct. Included in the portfolio was supplemental documentation (syllabi, student evaluations, peer evaluations, and published and communicated contributions to teaching) in the form of an appendix.

I also had an opportunity to restructure my teaching philosophy to accommodate the changes I made to my methods and styles of instruction. Before entering academe, my teaching philosophy was shaped by what I had observed in the classroom (i.e., based on my observations of effective teachers from a student perspective). However, after several years of teaching, my perspective reflected my own experiences, from which I created four fundamental principles (PROF: Passion, Rapport, Organization, Fairness) based on the tenet “by example”; these principles serve as the foundation of my teaching philosophy. I discovered that I design instruction so that the students actively use specific intellectual skills to analyze various dimensions of course content. This is particularly important in a basic science course like medicinal chemistry. Students stand to learn more as a result of developing their intellectual skills, abilities, standards, and disciplines. They have the opportunity to assess their own work and learn how to assess the work of others. The overall process of portfolio development was extremely rewarding. I would encourage all new faculty to begin to assemble a teaching portfolio early in the academic pretenure process. It cannot be constructed in one sitting, but must evolve with time and be continually remodeled and shaped to be effective.

Service adopts different forms at all levels of academe. The current academic reward structure must be broadened to include measures and outcomes of service productivity, although this is unlikely to occur anytime soon. The question has been posed, “Is it advisable to decline requests for service, or will this be viewed negatively?” (7). This conflict abounds in the initial years, where the “just say no” policy for service may have immediate individual benefits in terms of time allocation but be detrimental in the long term if one is labeled as noncollegial or a nonplayer. The discord places new faculty in an ethical bind and limits faculty decision making to “whatever is best for tenure.” Although new faculty members are likely to enhance and broaden the scope of the missions of the department, school, university, profession, and community through the service component, the current reward structure argues against time allocations for service activities. Equity in service has been steady within our department during my initial years but has shifted with the recent departure of one faculty member and the movement of three faculty members to interim administrative positions. Does a fac-

ulty member “just say no” to service functions in light of these particular circumstances? Creamer states, “The profile of faculty across this country has remained so stubbornly homogenous because of the reluctance to relinquish traditional measures of faculty productivity. A narrow definition of what constitutes a contribution to knowledge represents only a fragment of academic discourse, and it awards the privilege of an authoritative voice to only a few scholars” (12).

After an evaluation of my initial five years, it became obvious that I had overcommitted to service activities during the pretenure period, perhaps to my disadvantage. In retrospect, I would argue against committing to an inordinate number of service activities, but there are several that I thoroughly enjoy and have found to overlap well with other scholarly activities. Serving as a manuscript reviewer, a member on a grant application review panel (study section), and providing professional society leadership have allowed me to give back to my profession, promote the visibility of our department, keep current with new advances in the field, and establish new professional relationships.

In light of the tripartite academic responsibilities, how does a new faculty member know he/she is on track? Our university adopted, many years ago, a yearly review in the form of an activity report for all faculty members (including tenured faculty); it is especially valuable during the pretenure years. These activity reports contain evidence of productivity in all arenas for each year of appointment. The tenured faculty members in each representative department review the new faculty members, and a comprehensive written evaluation is provided each year. My department chairman extends this practice by having a one-on-one meeting with me following the departmental review to discuss the review in terms of progression. In this capacity, I am made fully aware of my standing each year during the pretenure phase and can implement changes that are necessary to improve my progress.

So how does one establish equilibrium in the pretenure years? I think the answer to this question varies markedly with the type of faculty appointment (clinical, research, teaching). However, it can be established with a department, school, and university dedicated to a mission centered on the professional development of new faculty members, rewarding them for all areas of achievement (teaching, research, and service) when warranted. Tenure and promotion are indeed part of the reward system and should reflect the tripartite role charged to each of us in the academy.

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