REVIEWS

Rufus A. Lyman: Pharmacy's Lamplighter

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Rufus Ashley Lyman, a physician, was one of the most prominent leaders in US pharmacy education during the first half of the 20th century. He remains the only individual to be the founding dean at colleges of pharmacy at 2 state universities. His role in the creation and sustenance of the *American Journal of Pharmaceutical Education* provided a platform for a national community and a sounding board for faculty members and others interested in professional education. His efforts to increase pharmacy educational standards were instrumental in the abandonment of the 2-year graduate in pharmacy (PhG) degree and the universal acceptance of the 4-year bachelor of science (BS) degree. Lyman's simple approach and fierce championship of his beliefs led to his recognition as a lamplighter for the profession.

Curt P. Wimmer, chair of the New York Branch of the American Pharmaceutical Association (now the American Pharmacists Association (APhA)), introduced the 1947 Remington Honor Medalist, Rufus Ashley Lyman. Wimmer mentioned that Lyman worked as a lamplighter in Omaha, Nebraska, during medical school. Continuing the lamplighter analogy, Wimmer cited Lyman's work as a pharmacy educator and editor: "in the councils of your colleagues, your lamp became a torch emitting red hot sparks that often burnt and seared and scorched—but always made for progress."¹ This description provides an evocative image of one of the most prominent pharmacy educators and leaders of the first half of the 20th century.

Keywords: *American Journal of Pharmaceutical Education*, pharmacy education, American Association of Colleges of Pharmacy

Early Life

Lyman was born in 1875 in Table Rock, a small spot in Pawnee County, Nebraska. Lyman stated that his family was religious; his mother came from a long line of Presbyterian ministers.² His later leanings towards religion and politics were undoubtedly instilled by his mother, "an ardent republican and strong abolitionist."³

Lyman related that at an early age his parents decided that he "might be a failure as a farmer, but might have possibilities as a country doctor."⁴ He never explained the basis for their decision. In fact, Lyman was never able to help with the heavy farm labor because he was injured as a baby and did not begin walking until he was 3 years old. It was later discovered that he had several fused vertebrae and wore a heavy brace intermittently for the rest of his life.⁵

Rufus Lyman never had any formal links to pharmacy practice. Years later, the renowned historian George Urdang and personal friend of Lyman, commented that

Lyman had "enjoyed himself in the drugstore of a maternal uncle in Table Rock, who owned the store besides being a physician"⁶ No supporting evidence of this relationship has been located to date. In a short biographical sketch, Lyman's sister-in-law, an early graduate and faculty member of the college of pharmacy, noted that "he was proprietor of a drug store for 4 years" but no supporting evidence of this claim has been found.⁷

While the decision to become a doctor was formed early, the preparation to get there was not easy. Forgoing apprenticeship, Lyman entered the University of Nebraska as an undergraduate, receiving his bachelor of arts degree in 1897. He earned a master of science degree in parasitology in 1899, studying under Henry B. Ward who would later become the dean of the College of Medicine. Lyman taught physiology at Lincoln High School during his master's studies.⁶ After graduation he married Carrie Day, a Nebraska graduate of 1898.⁷ The young couple moved to Nebraska City for a year to teach at the School for the Blind, and then moved to Omaha where Lyman entered the Omaha Medical College. Lyman spent one summer as a replacement physician in a Wyoming coal mine; worked as a lamplighter for the city of Omaha,

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and during his final year, was a lecturer in physiology at the College of Medicine. After his 1903 graduation, Lyman practiced medicine in Omaha. His primary occupation, however, was as instructor of physiology and histology at the College of Medicine. He moved to Lincoln when the basic science component of the college was moved to the university campus, and in 1905, became the professor of pharmacodynamics, which was later called pharmacology.

Beginnings of the School of Pharmacy

Lyman recalled that University Chancellor E. Benjamin Andrews proposed the formation of a school of pharmacy within the College of Medicine.³ Robert Manley, University of Nebraska centennial historian, wrote that it was Lyman himself who pressed for the formation of the school.⁸ Lyman, however, claimed that he was “shanghaied” into the role when no pharmacist with the necessary qualifications could be found.⁹ The new school was approved by the Board of Regents on April 23, 1908. Lyman noted that the dean of the College of Medicine was a supporter while most faculty members and pharmacists were indifferent.³ Only 4 practitioners were active supporters; there were 900 drugstores in Nebraska at the time.¹⁰ This lack of enthusiasm likely was due more to the perceived role of the university than to pharmacy education itself since the Schools of Pharmacy at Creighton and Fremont were already in operation.

Whether Lyman was the instigator of the new school or shanghaied, he was named its first director while maintaining his titles as professor of pharmacology and director of the pharmacy and pharmacology laboratories. Lyman lost no time in integrating the new school into the state and national pharmacy community. Lyman wrote to *The Omaha Druggist* to announce the creation of the new school, stating that 2-, 3-, and 4-year programs were being offered, the last leading to a bachelor of pharmacy degree and that graduates of the program were eligible to enter graduate school.¹¹ His insistence on high educational standards was evidenced by the admission requirements of completion of 2 years of high school for the 2- and 3-year programs, and 4 years of high school for the bachelor's program.⁶ In June, 1908, he attended the annual meeting of the Nebraska Pharmaceutical Association (NPA) (Nebraska Pharmaceutical Association after 1910) and was invited to address the attendees.¹² He was elected to NPA membership at that meeting.

Lyman also took his introduction to pharmacy to the national level seriously. He attended the annual meeting of the American Pharmaceutical Association in Hot Springs, Arkansas, in September 1908 and became a member.¹³ For the rest of his life, he seldom missed an

NPA or APhA annual meeting, and he frequently served as an NPA delegate to the national meetings.

Lyman's attack on what he perceived as insufficient standards in pharmacy education began immediately. The typical pharmacy curriculum at the beginning of the 20th century was still largely lecture based; laboratory experience was not yet required. Graduation from a college of pharmacy was not a requirement to take the state board or to obtain a license in most states. New York was the first state, in 1905, to require graduation as a prerequisite for licensure.

Lyman had scant tolerance for a curriculum that he considered “devitalizing and nonstimulating.”¹⁴ He immediately added a strong focus in the biological sciences, requiring laboratory courses in biology, bacteriology, physiology, pharmacology, and biological assay.³ A course of lectures and laboratories in pharmacology was required as early as 1910, even in the 2-year PhG program, possibly the first such requirement in the United States. The course was taught by Lyman himself. His insistence on the biological sciences stirred up a hornets' nest.¹⁴ Lyman delivered a paper on the value of experimental pharmacology at the 1910 APhA meeting, arguing the need for pharmacists to understand biological as well as chemical principles.¹⁵ Lyman later recalled that his sanity was called into question by forces opposing the inclusion of pharmacology in the pharmaceutical curriculum for fear that it was treading on physicians' prerogatives.¹⁶

In 1913, the University of Nebraska applied and was accepted as a member of the American Conference of Pharmaceutical Faculties (ACPF), now the American Association of Colleges of Pharmacy (AACP). Membership was open to institutions that had been in operation for 5 years, agreed to comply with minimum admission requirements, including applicant's completion of 1 year of high school, and offered not less than 50 weeks of instruction taught over 2 full years.¹⁷ Of the 75 colleges in the United States, only 38 were members of the Conference.^{18,19} Lyman attended his first ACPF meeting the following year, and while he noted that he was too new to the group to say much, the demurral was more show than substance.²⁰ He took the floor to explain that the newly implemented entrance requirement of 4 years of high school was because Nebraska farmers were insisting on “4 years of high school work for their sons, then a 4 years' college course when they go into agriculture. They cannot understand why equal requirements should not be maintained in all colleges, especially the professional schools.”²¹ His comments were applauded although they must have been muted since most schools were still unwilling to require even a high school diploma much less provide a bachelor's level pharmacy curriculum.²² The

requirement for 4 years of high school was not imposed by the ACPF on all member schools until 1923, 10 years after Lyman imposed it at Nebraska.

Lyman was a physician, not a pharmacist, yet he quickly gained influence with other pharmacy educators from the leading colleges of pharmacy of his day. His unabashed championship of increased educational and professional standards was his ticket to acceptance by leaders, including Edward Kremers of Wisconsin, Joseph Remington of the Philadelphia College of Pharmacy, and Frederick Wulling of Minnesota. Within 3 years, Lyman was elected vice president, and the following year, president of the Conference. Examining the early *Proceedings* of the Conference, Lyman obviously was able to place his most outspoken opponents in the position of being against God, motherhood, and apple pie. His *modus operandi* was openness and simplicity, and his direct manner of speaking about his goals. Many found this quality baffling; it was not dean-like behavior. Lyman explained: "you can outsmart a lot of people by being too simple for them."²³

A College is Formed

Lyman frequently employed outside opinion to get his way. He would write to many individuals posing a question about a position for which he was seeking support. This often lent the weight of prominent names from peer state universities and institutions to his desired action. At the end of January 1914, he wrote many letters posing the question of whether the pharmaceutical sciences should be organized into a college with the same rank, privileges, and powers of other colleges within a university. If nothing else, the responses from the peer universities and the press showed that Lyman already had built an extensive network within pharmacy. One month later, he wrote Chancellor Samuel Avery and the Board of Regents recommending that the school be made an independent college and appended responses to his question. Lyman's request was based on both data and emotions. He noted that the entrance requirements of his school were now the same as all of the university's other colleges; that up to 50% of entering pharmacy students were registered for a 4-year degree; and that the 2-year program would be dropped in the near future. The emotional appeal played to institutional pride and self-image. Lyman wrote: "Since my appointment as Director, I have taken advantage of every opportunity to press the claim of the School of Pharmacy upon the druggists of the state. I have been received kindly and I am sure the school has the hearty support of the best and most progressive pharmacists of the state. They, however, naturally resent the fact that it is an appendage to the College of Medicine, and feel that pharmacy is entitled to recog-

nition as a college. In the work of the American Pharmaceutical Association and in the American Conference of Pharmaceutical Faculties, I am constantly embarrassed by the same sentiment and it works against the school to a considerable extent, both within and without the state."²⁴ On April 28, 1915, the Board of Regents agreed and voted "that a college of pharmacy is hereby established in the university and Professor R. A. Lyman is hereby appointed dean of said college."²⁵ In 1926, the University of Nebraska was one of the first 3 schools to offer only a BS-level program in pharmacy, 6 years before it was mandated nationally.³

Lyman as a National Leader

Lyman quickly rose to positions of influence and leadership in pharmacy. One early example was the APhA meeting in Atlantic City in 1916. APhA president William C. Alpers, dean of the Western Reserve College of Pharmacy in Cleveland, leveled charges of poor leadership and mismanagement against the Council (now the Board of Trustees).²⁶ A special committee was named to examine the address and make recommendations for action. A veritable who's who of pharmacy was named to the committee including past APhA presidents James Hartley Beal and Lewis C. Hopp; members of the APhA Council; Martin I. Wilbert of the Public Health Service; Samuel C. Henry past president of NARD; and Dean Lyman.²⁷ When the Committee reported back to APhA, Lyman took the position that he could not pass judgment on either the president's criticisms or on the defenders of the status quo without having the full facts made available from the Association's records. Thirty years later, the incident was recalled by Robert Fischelis, Chief Executive Officer of APhA. Fischelis noted that this was the first time that many had heard of Lyman, but his supplementary statement to the committee report was unforgettable: "here was a non-conformist who did not believe in signing reports with which he could not conscientiously agree. . . . It has influenced me as I am sure it has others to speak out and vote convictions regardless of expediency."²⁸

In August 1915, Lyman was elected vice president of the American Conference of Pharmaceutical Faculties. In 1916, he was elected president, just 3 years after joining the organization. Lyman's presidential address, certainly one of the longest in the Conference's history, established an ambitious agenda for pharmacy education and provided insights into principles that guided his entire career.

Lyman put forward 15 recommendations. Most were what might be considered normal organizational business. These encompassed materials to be included in the annual proceedings, committee structure, and annual meeting speakers. One business matter that especially

caught Lyman's attention was the continuing problem of conference members who did not participate in the annual meeting. Some had never attended. . . even after 16 years of membership. He noted that it was not dues that the Conference needed but active participation using the analogy that a "man who buys a Liberty Bond does not render the same service as he who goes to the trenches in France."²⁹ Lyman recommended that the Committee on Activities of Students and Alumni devise a plan to establish an honorary pharmacy scholarship fraternity. He explained that other professions had such groups, and having one would benefit pharmacy. After a gestation period that included the First World War, Rho Chi was launched in 1925.

The remaining recommendations were action-oriented and tackled the issues of educational standards, including an external study of pharmacy schools by the Carnegie Foundation, apprenticeship, prerequisite high school graduation for admission to a college of pharmacy, and the length of the pharmacy course of study.

Conference leaders asked the Carnegie Foundation to study pharmacy, largely in reaction to the 1910 Flexner Report on medical education. In a 1915 speech, Flexner concluded that pharmacy was not a profession since it was not intellectual in character and was only secondary to medicine.³⁰ Despite that pronouncement, or maybe even because of it, Lyman recommended asking the Carnegie Foundation once again to undertake an analysis of pharmacy and, if refused, to seek another agency to do so. Lyman's resolution to continue to nag the Carnegie Foundation was adopted. This action and inaction would continue 7 years until the Commonwealth Fund agreed to underwrite Charter's study of pharmacy education from a functional perspective in 1924; Lyman became an active member of the study's advisory committee.³¹

Lyman stated "I cannot close without offering a protest against the apprentice system." He challenged the common justification that apprenticeship made a better man. In fact, he said, it did little more than crush the spirit and leave a lot of corpses.²⁹ As important as the resolution was, several of Lyman's prescient comments in the discussion that followed were probably more so. The first questioned the quality of the education that would be required in government service, a recurring issue in both World War I and II. The second emphasized the need of education to do justice to all young men and women in pharmacy. The Committee on the Presidential Address was against doing anything that would put the Conference on record that apprenticeships should be eliminated and offered a watered-down resolution.²⁹

The issue of entrance requirements to colleges of pharmacy had long tormented the Conference. It was

not until 1908 that ACPF required 1 year of high school education for college admission as a prerequisite for membership in the Conference. Lyman's impatience with the continued justification of low standards triggered his recommendation to require, by 1920, satisfactory completion of 4 years of high school. However, the April 1917 circular letter from the Navy Surgeon General William C. Braisted stating that "the pharmacist in civil life is not in any way fitted to undertake the duties of the naval pharmacist" was certainly a shock.³⁰ Lyman then took a familiar approach to the issue; he wrote a number of university presidents asking what the profession needed to do to better itself. The consistent answer was to increase the quality of students, and the way to ensure this was to require 4 years of high school for admittance. The ensuing debate was lengthy. Lyman had implemented the requirement at Nebraska in 1913, and even as the debate continued, more than 50% of the conference members already required 4 years of high school. Finally, the mandated 1923 date was adopted by the Conference.²⁹

The appropriate length of the college course of study continued to be a contentious issue. Lyman recommended that, in 1925, the Conference standard become 1 year of college and, in 1930, 2 years. As was so frequently the case, the discussion soon devolved into camps favoring the increased standard or taking the stance that society would not stand for it. Lyman explained that his intent was to set a date for the implementation of college standards. If the dates he suggested were too ambitious then the Conference should set a definite date that was reasonable – but one way or another, set a definite date. The Conference faltered and failed to pass the resolution.

The full impact of Lyman's recommendations came from the report of the Committee on the President's Address. Chair William Anderson of the Brooklyn College of Pharmacy stated "it looks as if you want to make a record here, so that no other man who comes after you can do anything." He then added "I believe we ought to vote him [Lyman] our thanks for the splendid position he has taken. We see him more as he really is, and recognize the great interest he has in the welfare of pharmacy and pharmaceutical education."²⁹

Champion of Inclusion

Lyman was an early advocate of including women and minorities in the profession. In his 1917 ACPF presidential address, he recommended establishing an honorary fraternity where membership was based only on scholarship.²⁹ A year later the guiding principles were fully stated; the fraternity, to be called Rho Chi, was "to be non-secret, with the baccalaureate degree as the

minimum requirement, and scholarship is to be the basis of election, membership to be open to both men and women and no race distinction.”³² Lyman was making his point about increasing standards. First there was the minimum requirement of a BS degree offered by few colleges and second was the inclusion of women and minorities. In 1913, there were fewer than 100 African-Americans pharmacy students in the United States.³³ Of the 6,165 pharmacy students in the United States, 227, less than 4%, were women.³⁴

In the 1930s, there was a move on the part of Howard University, predominately African-American, to close its pharmacy school. Lyman argued for and supported its continuance. In a letter to his friend, Dean Wilson at the University of Georgia, Lyman shared that his great grandfather on his mother’s side was a slave owner. Lyman continued that “there has never been a race issue and in my own mind I draw no lines between friends north, south, east, west and black and white and yellow, jew [sic] or gentile.”³⁵ What influence Lyman had on Howard is unrecorded; however, what is known is that the College of Pharmacy at Howard remained open and continued to meet the standards required for accreditation.

In 1937, the increasing number of women entering colleges of pharmacy was seen by some as a problem; women students were averaging 10% of the entering class.³⁶ Lyman addressed the issue and the Conference’s penchant to refer perceived problems to a committee. In an editorial titled *The Editor’s Crime*, he wrote: “The Editor is charged with criminal negligence. He is the father of 3 daughters, all pharmacists and that they present a problem to pharmacy. Editor admits daughters have presented problems as girls, but not as pharmacists. Editor asks that the matter be referred . . . for girl control measures. Association . . . refers whole matter to the Committee on the Study of Menace of Women to Pharmacy.”³⁷

Lyman aided Zada Mary Cooper in the formation of Kappa Epsilon (KE) pharmacy sorority. When the sorority changed its name to fraternity, Lyman wrote to a KE leader fuming that he helped form a sorority for the women, not another fraternity. In his own blunt fashion, he concluded: “I hope I have not bored you too much but when the opportunity arises for me to explode I cannot contain myself.”³⁸ KE named Lyman its honorary founder in 1955.³⁹

One of the great tragedies of World War II occurred in the United States when more than 120,000 Japanese American men, women, and children, most of whom were American citizens, were removed from the west coast of the United States and sent to concentration camps in the interior of the country. Among those affected were more than 130 pharmacy students. The University of Nebraska

and its College of Pharmacy was one of the few institutions which took in some of these students.⁴⁰ In 1942, Lyman wrote to the War Relocation Authority stating that “Miss Midori Sakamoto is applying for entrance in the College of Pharmacy of the University of Nebraska. This is to certify that I will sponsor her while here and take complete responsibility for her while she is in this institution.”⁴¹ Midori later married Tom Miya, also a pharmacy student removed from the West Coast, who credited his education and career to Nebraska and to the help of its faculty and dean.⁴⁰

Lyman the Man

In his younger days, Lyman was a handsome young man and appeared well dressed at times. As he aged his face became weather-worn and craggy, with unruly hair parted somewhere in the middle, looking somewhat like the cowboy-philosopher Will Rogers. He was described by his student, Mel Gibson, as “usually dressed in rather organized dishevelment. The shirt collars never seemed to fit and starch did not seem to be part of the Lyman laundry regimen. Ties were nondescript, and it was always apparent not too much time was spent tying them.”⁴²

Lyman had a temper just as he had a sense of humor, and sometimes the 2 merged into a very effective tool. At one point he wrote about his ire with another dean: “give me a chance to meet him in public and I will chase him into Montgomery-Ward’s cellar and let him have it with the cockroaches where he belongs. I would only hesitate to do it because I would feel I was insulting the cockroaches. I do not believe that I would ever dare to look a cockroach in the face after that.”⁴³ His anger would quickly fade although the reason would not necessarily be forgotten. Issues such as the failure to support or indifference to expanded educational and professional standards angered Lyman most.

In one of the dinner speeches when Rufus Lyman received the Remington Honor Medal alumni, Robert Hardt shared his memory of one of the dean’s physiology examinations. “One class in physiology came well primed for an examination having to do with the digestive tract. It was anticipated that there would be at least 50 questions requiring a prodigious memory. Imagine the surprise of those who had crammed to the last minute when they were confronted with one item on the test: “Digest a ham sandwich and a glass of milk.”⁴⁴

There are numerous tales about Lyman’s sense of humor and love of a good story; indeed he made a habit of using stories to make his point. He was also a life-long abstainer from alcoholic beverages, although he also was known to join others in a bar for a sing-along after a pharmacy meeting.⁴⁵

Birth of the *American Journal of Pharmaceutical Education*

By 1920, ACPF was talking about the need to increase publicity about the work of the colleges but little action ensued. In 1921, Lyman, chair of the executive committee, recommended that the Conference accept the offer of the *Journal of the American Pharmaceutical Association* and “that the Chairman of the Executive Committee be designated to act as editor, and that he sees to it that important material bearing upon conference matters appear in each issue of the monthly *Journal*.”⁴⁶ The recommendation and the agreement to pay a fee for page charges were approved and in December Lyman’s first editorial appeared in *JAPhA*. His initial topic was acknowledging the conviction of those he called “prominent retail pharmacists” to include more instruction in the “art and science of compounding” in the curricula.⁴⁷

In 1920, even before the agreement with APhA, the Conference considered the possibility of establishing a new quarterly journal.⁴⁸ ACPF had been publishing the *Proceedings* of the annual meeting, but many felt that these were expensive and untimely. At the 1935 AACP annual meeting, Lyman returned to the idea of a quarterly publication and asked for authorization to do a feasibility study.⁴⁹

Lyman later reported that the establishment of a journal was desirable and recommended the *American Journal of Pharmaceutical Education* as the title. He argued that it would cost the Association less than the *Proceedings* and the annual contribution to *JAPhA* together (\$4.75 less).⁵⁰ However, one of his important reasons for pushing the new initiative was to give the young faculty, “the young men and women . . . a piece of work to do, that I think will do pharmaceutical education more good than any other one thing that could be done at the present time” in what was “essentially a dean’s” organization.⁵¹

The first issue of the *American Journal of Pharmaceutical Education*, the first English language journal devoted to pharmacy education, appeared in January 1937. With the focus on “the problems of pharmaceutical education and administration,” the *Journal* became a vibrant voice for issues that Lyman believed were essential to the growth and welfare of pharmacy.⁵² Reports dealt with meetings and papers about educational endeavors as well as social happenings of promotion and marriage. This was the editor’s way of building a community long before instant messaging and e-mail were available. Lyman strongly believed that the *Journal* would be good for pharmacy and pharmacy education.

Lyman believed in understanding an issue and would go out of his way to examine every side of a debate, even

to the point of commissioning papers that took positions against his own. He stated that his interests were not bound by anything other than educational progress and shared that “I will reluctantly oppose my best friend, or even an elder in the Presbyterian Church, if I believe that his ideas are unprogressive. I will properly work with any man, even a Democrat, if I am convinced that our cooperation will make for real progress in the field of pharmaceutical education.”⁵³

Lyman was a Presbyterian and Republican, facts that he shared quickly with new acquaintances. In what would now be considered politically incorrect behavior, he worked these facts into numerous editorials and speeches. For years he wrote the biographical sketch of the incoming president of AACP. For example, Lyman wrote about Dean Hugo Schaefer of the Brooklyn College of Pharmacy: “In politics, the Dean is a Republican, but admits he has ‘switched’ occasionally. . . . His religious affiliation is Lutheran which, with his political beliefs, makes him eligible for Presbyterian affiliation.”⁵⁴

Lyman remained the editor of the *Journal* until 1955 and continued to serve as consulting editor until his death. His advice to the new editor, Melvin Gibson, was succinct: “The sign that you are doing a good job is that you are keeping the Indians stirred up. When you do that there is progress.” In another letter he confessed “I often think how dull my life would be if everyone had agreed with me.”⁵⁴ In a tribute paid to his editorial skills, Robert Swain, editor of *Drug Topics*, recalled that “he wrote with an ink compounded of wisdom, keen analytical insight, deep human feeling, the sincerest of opinion . . . he can be firm without rancor, courageous without anger, critical without harshness, fair without assertions of self virtue.”⁵⁵

Problems and Plans Committee

Lyman had a life-long commitment to youth, both in Nebraska and nationally. He was the founding physician of the student health service and during registration would meet each new student with a remark about his or her home town. He later stated that this might be the first and last kind word they hear in their academic sojourn.⁵⁶ He rebuked his fellow deans whose interest in students was limited to tuition and fees. In his 1917 ACPF presidential address, he repeated the admonition that a “man was not worthy of a deanship who did not keep in touch with and have a concern for his students after graduation.”²⁹

Numerous stories from students attest to the impact that Lyman had upon them as a teacher and mentor. Robert Hardt, later vice-president at Hoffman-LaRoche, spoke of how he, and all of the students in the college, “considered themselves to be special charges of the

dean.”⁴⁴ Charles Bliven, later dean and the first executive secretary of AACP, recalled how Lyman would teach by reading letters from former students with pride, thereby signaling “that he was expecting each of us to serve to the best of our ability whatever our place in the profession might be.”⁵⁷

Lyman’s attitude towards students was evident when some deans bragged about the number of students unsuccessful in their studies. Lyman scolded them: “For us to say that 40% of our student body should fail because that is the percentage of failures in colleges of arts and sciences is folly. Maybe we can do a better job and enable a much larger percentage of them to prove successful. We say to our students, ‘this is your alma mater, your college mother. You must love her, honor and revere her always.’ But I ask you, . . . have you ever known a mother worthy of the name who boasted of high mortality among her children. I fear that we shall find it necessary to continue to fail students in our colleges of pharmacy, but let us do it regretfully and obtain our satisfaction from those we succeed in helping and not those we fail.”⁵⁸

Lyman’s interest in the next generation of pharmacists extended beyond his students to include younger faculty members. The American Conference of Pharmaceutical Faculties was dominated by deans. Lyman wrote an editorial titled “the menace of deans to pharmacy” suggesting the slogan, “what pharmaceutical education most needs is a lot of funerals among the deans.”⁵⁹ He was recalling the intransigence of some of the conference leadership to increase educational standards. There was little opportunity for young faculty to participate and lead, a situation that clearly troubled Lyman. Lyman formed the Problems and Plans Committee and recruited the young Turks with their energy and enthusiasm, into the mainstream of the organization. He continued this effort when he was asked by the J.B. Lippincott Company to become editor-in-chief of a new series of pharmacy texts. Lyman used senior educators, mostly deans, as advisors, but assigned the writing to promising young men with the latest technical training.⁶⁰ Many of the promising young authors went on to become deans and successful professors later in their careers.⁶¹

Founder – Yet Again

In 1946, at the age of 72, and having served as dean for 38 years, Rufus Lyman retired from the University of Nebraska, not because of health, but because of age. He had already received 2 exemptions from the mandatory retirement age.

Arizona pharmacists had been trying to establish a school of pharmacy at the university in Tucson since

the 1920s but the depression and World War II intervened. In the post-war years, the effort was renewed and in April 1947, the Board of Regents voted to establish a school of pharmacy as part of the College of Liberal Arts beginning in September of that year.⁶² What transpired shows the speed with which academia could move when it wanted. On May 29, Dean Nugent of the College of Liberal Arts wrote to the University of Nebraska asking whether the retiring dean might be interested in the position of director of the new school.⁶³ Dean emeritus Lyman responded on June 1 that the “possibilities are challenging . . . I would be interested in having a part in that work.”⁶⁴ On June 28, the University of Arizona invited Lyman to come to Arizona and form the school beginning on September 26. On June 30, Lyman replied by telegram “I accept the directorship of the School of Pharmacy. . . . I am grateful for the opportunity of assisting in such a project in a virile institution in a great state.”⁶⁵

The ensuing months were hectic; Lyman did not arrive in Tucson until the beginning of September. In the interim time, and from a distance, he negotiated the recruitment and hiring of faculty members, secured classroom and laboratory spaces, and coordinated the curriculum with other university departments. On September 26, there were 84 freshmen and transferring sophomores registered, double the initial prediction.⁶⁶ Within a year Lyman was back to his old habit of pushing for increased educational standards as he recommended the initiation of a mandatory year of prepharmacy studies. Although the 5-year program (1 year in liberal arts plus 4 in the College of Pharmacy) did not begin until the entering class in 1951, the seed had been sown.⁶⁷

Lyman stayed at Arizona for 3 years, retiring in June 1950. In this period, Lyman succeeded in having the school elevated to college status within the university, the college was given a “4-Y” accreditation by the American Council on Pharmaceutical Education, and the first class graduated.

Lyman’s stature was a boon to Arizona. There had been criticism of the formation of new colleges in the post-war period.⁶⁸ Some felt that the professional advances won during the war might be dissipated if there were too many pharmacists and so desired to limit enrollments.⁶⁹ Pharmacy leadership in Arizona likely was aware of this sentiment and was delighted to have someone of Rufus Lyman’s experience in the university. His reputation, personal network, and national experience established immediate credibility for the new school.

Honors

Lyman received many honors from his adopted profession. In spite of his blunt approach, opposition to low

educational standards and status quo, and outspokenness, his intent was recognized early on by his election as president of the ACPF. He subsequently served a number of years on the executive committee of the association. Lyman was nominated for the 1922 APhA presidency but failed to win.⁷⁰ He was elected the honorary president of APhA for 1952-1953. In 1955, the AACP conferred honorary membership on Lyman, the highest honor the association could bestow.⁷¹ In that same year the American Institute of the History of Pharmacy elected him as its honorary president.³ In 1969, The American Association of Colleges of Pharmacy established the Lyman Award for the outstanding paper published in *AJPE*. The University of Nebraska named the College of Pharmacy building Lyman Hall.

Rufus Lyman received the Remington Honor Medal, the highest recognition that pharmacy can bestow in 1947. In the fashion of the day, there were 6 introductory speeches by past students, professional leaders, and friends; those were before Lyman spoke. Much like in his presidential address at ACPF delivered 30 years earlier, Lyman was candid about pharmacy education, where it had come from, and where it needed to go. In his address, titled, "Don't Confuse Training with Education," he recalled pharmacy's slow progress towards embracing university-level education as well as the need to increase standards so that pharmacy could be placed on equal footing "with all other fields of professional education." He addressed the fear of "too many colleges of pharmacy and simultaneous fear in the decline in the number of pharmacists." Training, he said, was teaching students to imitate while education was teaching students how to analyze problems they had not seen before. Lyman melded these messages into an optimistic challenge and legacy for what happened and is happening in pharmacy: "if we educate instead of train, no man in this room will live to see the day when there will be an over-supply of pharmacists, for the areas of service and the avenues that lead to them will have become worldwide."⁶⁸

Lyman recounted the observation of Hugo Schaefer that receiving the Remington was a swansong; the recipient was through, without portfolio and without a vote.⁷² Lyman once again, as he had so many times in the past, ignored precedent and went on to found his second university-based college of pharmacy at Arizona. For another 8 years he continued as the active and influential editor of the *AJPE* serving always as pharmacy's lamp-lighter.

Legacy

Lyman left at least 2 great legacies. One was the formation of the *Journal*. In a period when educators were

striving to deal with numerous issues, Lyman's *Journal*, as *AJPE* was called by Dean Earnest Little, fulfilled the need of establishing a community for American pharmacy educators.⁵⁵ Even more important was his dogged insistence on the highest possible educational standards. He put his beliefs to practice first at the University of Nebraska and later at the University of Arizona and then used these examples to cajole, lead, and even shame the rest of pharmacy to move forward. Students recalled Lyman, teacher and dean, as a proud father when his progeny were positive and productive leaders in their communities, wherever they happened to be. His influence on students extended far beyond those he was directly responsible for because it included those who were taught by his students as well as generations of members of the student groups he helped found. Edward C. Elliott, the leader of the Pharmaceutical Survey, stated his perception of Dean Lyman succinctly: "Did I have the requisite academic authority, there would be conferred upon Rufus Lyman the degree of D.S.P.—Doctor of the Spirit of Pharmacy—in recognition of his selfless and altruistic contributions to the strength of and services to the profession he has served so long. Pharmacy will ever need men of his character and competency."⁷³

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